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# Western Electric ELECTRICAL SUPPLY YEAR BOOK

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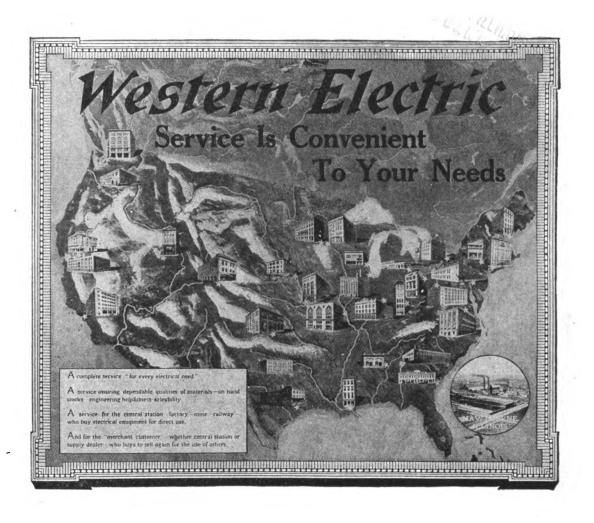
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This 1918 Year Book follows the plan of uniform list prices and discount which has been a popular feature of our Year Books during the past three years. Manufacturers' list prices are also shown on schedule material and certain other standard lines for the convenience of those customers who prefer to buy on the basis of manufacturers' discounts, or who desire an independent means of checking our invoices. Western Electric quotations and bills will, as in the past, ordinarily be made on the basis of net prices.

1918 is likely to be another year of fluctuating values. No printed schedule of prices can therefore be expected to have any permanent value as an accurate gauge of costs. The Western Electric uniform list price plan used throughout this book is, however, we believe, the most complete electrical guide published for rough estimating, for the engineers' requisitions, and for use at the retail counter.

Obviously, however, in the purchase of any considerable quantity of supplies, when exact prices are desired, they may always be secured from the traveling representative or on request to our nearest office.

This Year Book is regularly supplemented by descriptive matter on all classes of equipment bought or sold by the electrical trade. These may be had upon request.

Substantially all of the material listed in the catalog is carried in stock at our distributing houses. In ordering, customers are advised to anticipate their future needs and as far as possible place their requisitions for standard package units. By eliminating the need for assembling and packing broken lots of material we are saved a considerable item of expense, which saving is passed along to the customer in the form of lower prices.

We look forward to the opportunity to serve you.

Western Electric Company

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Cable Racks   1058   Chain, Pull Socket   572,573	Brackets, Phantom 1026 Brackets, Pole 1023 Brackets, Presteel 1107 Brackets, Prussian Hook 1019 Brackets, Spreader 1022, 1024 Brackets, Standard 538 Brackets, Switchboard 490 Brackets, Telephone 74 Brackets, Transposition 1006, 1027 Brackets, Wall 485, 488-490, 499, 502, 1019-1022, 1054 Brackets, Wood 1006 Bracket Tubes 490 Brake Arms, Iron 1025	Cables, Automobile.       230         Cable, Border Light       .955         Cable Cars       .1070         Cable, Circular Mills.       .946, 949         Cable Clamps, Long-Saut       .1057         Cable Clips, Boston       .1055         Cable Clips, Metropolitan       .1055         Cable, Deck       .955         Cable Duct Shields       .1076         Cable, Elevator       .955         Cable Grips       .1060         Cable Hangers       .806, 1055         Cable Hangers       .806, 1055         Cable Hangers       .055	Carts, Tool.       1072         Car Wire       959         Cases, Carrying       188         Cases, Electrician's       1097         Cases, Plug Fuse       754         Casing, Rubber       657         Ceiling Brackets       500, 501, 505-507, 1001, 1014, 1015         Ceiling Buttons       688         Ceiling Sockets       636         Ceiling Units       500, 501, 505-507, 509-511         Cement, Commutator       553         Cement Mico       571         Central Battery Telephones       53
Brass Connectors, Insulated         800         Cable Reel Jacks         1070         Changers, Lamp         428           Brass Terminal Bushings         801         Cable Reel Jacks         1075         Changers, Lamp         428           Break Arms         1024, 1025         Cable Reel Stands         1075         Chase Couplings         803           Brewery Cord         956         Cable Reel Wheels         1073         Chase Nipples         803           Bridle Rings         1056, 1057         Cable Rings, Aerial         1056         Chau-Phone         232           Cable Wire         953         Cable Rollers         1075         Choke Coils         1106, 1109           Bryant Flush Receptacles         609, 610         Cable Saws         1116         Chucks, Extension         1091, 1096           Bryant Receptacles         588, 589, 593-         Cable Splitting Knives         1116         Circuit Breakers, A.C. and D.C. 129-140           Bryant Rosettes, Porcelain         602, 603         Cable, Stage         956         Circuit Breaker, Carbon         129-140           Bryant Sockets         574-579, 585, 586, 588,         Cable, Switchboard         947, 957         Circuit Breakers, Carbon         129-140           Cable Taps         742         Clamp Bushings         <	Brackets, Phantom 1026 Brackets, Pole 1023 Brackets, Presteel 1107 Brackets, Prussian Hook 1019 Brackets, Spreader 1022, 1024 Brackets, Standard 538 Brackets, Switchboard 490 Brackets, Telephone 74 Brackets, Transposition 1006, 1027 Brackets, Wall 485, 488-490, 499, 502, 1019-1022, 1054 Brackets, Wood 1006 Bracket Tubes 490 Brake Arms, Iron 1025 Branch Boxes, D. & W 764	Cables, Automobile.       230         Cable, Border Light       955         Cable Cars       1070         Cable, Circular Mills.       946, 949         Cable Clamps, Long-Saut       1057         Cable Clamps, Matthews       1057         Cable Clips, Boston       1055         Cable Clips, Metropolitan       1055         Cable, Deck       955         Cable Duct Shields       1076         Cable, Elevator       955         Cable Grips       1060         Cable Hangers       806, 1055         Cable Hangers, Marlin       1055         Cable Hooks       1058	Carts, Tool.       1072         Car Wire       959         Cases, Carrying       188         Cases, Electrician's       1097         Cases, Plug Fuse       754         Casing, Rubber       657         Ceiling Brackets       500, 501, 505-507,         1001, 1014, 1015         Ceiling Buttons       688         Ceiling Sockets       636         Ceiling Units       500, 501, 505-507, 509-511         Cement, Commutator       553         Cement Mico       571         Central Battery Telephones       53         Chafing Dish       375         Chain, Oneida       1121
Brass Terminal Bushings	Brackets, Phantom 1026 Brackets, Pole 1023 Brackets, Presteel 1107 Brackets, Prussian Hook 1019 Brackets, Spreader 1022, 1024 Brackets, Standard 538 Brackets, Switchboard 490 Brackets, Telephone 74 Brackets, Transposition 1006, 1027 Brackets, Wall 485, 488-490, 499, 502, 1019-1022, 1054 Brackets, Wood 1006 Bracket Tubes 490 Brake Arms, Iron 1025 Branch Boxes, D. & W 764 Brascolites 514-519	Cables, Automobile.       230         Cable, Border Light       .955         Cable Cars       .1070         Cable, Circular Mills.       .946, 949         Cable, Circular Mills.       .946, 949         Cable Clamps, Long-Saut       .1057         Cable Clips, Boston       .1055         Cable Clips, Metropolitan       .1055         Cable, Deck       .955         Cable, Deck       .955         Cable Duct Shields       .1076         Cable, Elevator       .955         Cable Grips       .1060         Cable Hangers       .806, 1055         Cable Hangers       .806, 1055         Cable Hooks       .1058         Cable, Mining and Park       .948         Cable, Moving Picture Machine       .957	Carts, Tool.       1072         Car Wire       959         Cases, Carrying       188         Cases, Electrician's       1097         Cases, Plug Fuse       754         Casing, Rubber       657         Ceiling Brackets       500, 501, 505-507, 1001, 1014, 1015         Ceiling Buttons       688         Ceiling Sockets       636         Ceiling Units       500, 501, 505-507, 509-511         Cement, Commutator       553         Cement Mico       571         Central Battery Telephones       53         Chaing Dish       375         Chain, Oneida       1121         Chain Pull Receptacles       784
Break Arms.       1024, 1025       Cable Reel Wheels       1073       Chase Nipples       803         Brewery Cord       .956       Cable Rings, Aerial       1056       Chau-Phone       232         Bridle Rings       .1056, 1057       Cable Rings, Pierce       1056       Chisels       .1106, 1109         Bridle Wire       .953       Cable Rollers       1075       Choke Coils       .157, 159         Broilers, Hughes       .955       Cable Solder       .552       Christmas Tree Outfits       .411         Bryant Plugs       .604-608       Cable Splitting Knives       .1116       Circuit Breakers, A.C. and D.C129-140         Bryant Receptacles       .588, 589, 593-       Cable, Stage       .956       Circuit Breaker Attachments,         .598, 613, 614       Cable Strippers       1116       A.C. and D.C134         Bryant Rosettes, Porcelain       .602, 603       Cables, Suburban       .948         Bryant Sockets       .574-579, 585, 586, 588,       Cable, Switchboard       .947, 957         Cable Taps       .742       Clause Bushings       .781	Brackets, Phantom 1026 Brackets, Pole 1023 Brackets, Presteel 1107 Brackets, Prussian Hook 1019 Brackets, Spreader 1022, 1024 Brackets, Standard 538 Brackets, Switchboard 490 Brackets, Telephone 74 Brackets, Transposition 1006, 1027 Brackets, Wall 485, 488-490, 499, 502, 1019-1022, 1054 Brackets, Wood 1006 Bracket Tubes 490 Brake Arms, Iron 1025 Branch Boxes, D. & W 764 Brascolites 514-519 Brass Cleats 1160	Cables, Automobile.       230         Cable, Border Light       .955         Cable Cars       .1070         Cable, Circular Mills       .946, 949         Cable Clamps, Long-Saut       .1057         Cable Clips, Boston       .1055         Cable Clips, Metropolitan       .1055         Cable, Deck       .955         Cable, Deck       .955         Cable, Elevator       .955         Cable Grips       .1060         Cable Hangers       .806       .1055         Cable Hangers       .1058       Cable, Mining and Park       .948         Cable, Moving Picture Machine       .957       Cable Racks       .1058	Carts, Tool. 1072 Car Wire
Brewery Cord       .956       Cable Rings, Aerial       .1056       Chau-Phone       .232         Bridle Rings       .1056, 1057       Cable Rings, Pierce       .1056       Chisels       .1106, 1109         Bridle Wire       .953       Cable Rollers       .1075       Choke Coils       .157, 159         Broilers, Hughes       .955       Cable Solder       .552       Christmas Tree Outfits       .1091, 1096         Bryant Plugs       .604-608       Cable Splitting Knives       .1116       Circuit Breakers, A.C. and D.C129-140         Bryant Receptacles       .588, 589, 593-       Cable, Stage       .956       Circuit Breaker Attachments,         .598, 613, 614       Cable Strippers       .1116       A.C. and D.C134         Bryant Rosettes, Porcelain       .602, 603       Cables, Suburban       .948       Circuit Breakers, Carbon       .129-140         Bryant Sockets       .574-579, 585, 586, 588,       Cable, Switchboard       .947, 957       Circuit Breakers, Carbon       .129-140         Cable Taps       .742       Claup Bushings       .781	Brackets, Phantom 1026 Brackets, Pole 1023 Brackets, Presteel 1107 Brackets, Pressian Hook 1019 Brackets, Spreader 1022, 1024 Brackets, Standard 538 Brackets, Switchboard 490 Brackets, Telephone 74 Brackets, Transposition 1006, 1027 Brackets, Wall 485, 488-490, 499, 502, 1019-1022, 1054 Brackets, Wood 1006 Bracket Tubes 490 Brake Arms, Iron 1025 Branch Boxes, D & W 764 Brascolites 514-519 Brass Cleats 1160 Brass Connectors, Insulated 800	Cables, Automobile.       230         Cable, Border Light       .955         Cable Cars       .1070         Cable, Circular Mills       .946, 949         Cable Clamps, Long-Saut       .1057         Cable Clips, Boston       .1057         Cable Clips, Boston       .1055         Cable Clips, Metropolitan       .1055         Cable, Deck       .955         Cable Duct Shields       .1076         Cable, Elevator       .955         Cable Grips       .1060         Cable Hangers       .806, 1055         Cable Hangers, Marlin       .1055         Cable Hooks       .1058         Cable, Moving Picture Machine       .957         Cable, Moving Picture Machine       .957         Cable Racks       .1058         Cable Reel Jacks       .1070	Carts, Tool.       1072         Car Wire       959         Cases, Carrying       188         Cases, Electrician's       1097         Cases, Plug Fuse       754         Casing, Rubber       657         Ceiling Brackets       500, 501, 505-507, 1001, 1014, 1015         Ceiling Buttons       688         Ceiling Sockets       636         Ceiling Units 500, 501, 505-507, 509-511       509-511         Cement, Commutator       553         Cement Mico       571         Central Battery Telephones       53         Chain, Oneida       1121         Chain, Oneida       1121         Chain, Pull Receptacles       784         Chain, Pull Socket       572, 573         Changers, Lamp       428
Bridle Rings       .1056, 1057       Cable Rings, Pierce       .1056       Chisels       .1106, 1109         Bridle Wire       .953       Cable Rollers       .1075       Choke Coils       .157, 159         Broilers, Hughes       .395       Cable Saws       .1116       Chucks, Extension       .1091, 1096         Bryant Flush Receptacles       .604-608       Cable Solder       .552       Christmas Tree Outfits       .411         Bryant Receptacles       .588, 589, 593-       Cable, Stage       .956       Circuit Breakers, A.C. and D.C129-140         Cable, Stage       .956       Circuit Breaker Attachments,       A.C. and D.C134         Bryant Rosettes, Porcelain       .602, 603       Cables, Suburban       .948         Bryant Sockets       .574-579, 585, 586, 588,       Cable, Switchboard       .947, 957         Cable Taps       .742       Circuit Breakers       Carbon       .129-140         Circular Mils Cables       .946, 949       Circular Mils Cables       .946, 949         Cable Taps       .742       Cable Subsings       .781	Brackets, Phantom 1026 Brackets, Pole 1023 Brackets, Presteel 1107 Brackets, Pressian Hook 1019 Brackets, Spreader 1022, 1024 Brackets, Standard 538 Brackets, Switchboard 490 Brackets, Telephone 74 Brackets, Transposition 1006, 1027 Brackets, Wall 485, 488-490, 499, 502, 1019-1022, 1054 Bracket Tubes 490 Bracket Tubes 490 Bracket Tubes 514-519 Brasc Cleats 1160 Brass Connectors, Insulated 800 Brass Terminal Bushings 801	Cables, Automobile.       230         Cable, Border Light       .955         Cable Cars       .1070         Cable, Circular Mills       .946, 949         Cable Clamps, Long-Saut       .1057         Cable Clips, Boston       .1057         Cable Clips, Boston       .1055         Cable Clips, Metropolitan       .1055         Cable, Deck       .955         Cable Duct Shields       .1076         Cable, Elevator       .955         Cable Grips       .1060         Cable Hangers       .806, 1055         Cable Hangers, Marlin       .1055         Cable Hooks       .1058         Cable, Moving and Park       .948         Cable, Moving Picture Machine       .957         Cable Racks       .1058         Cable Reel Jacks       .1070         Cable Reel Stands       .1075	Carts, Tool. 1072 Car Wire
Broilers, Hughes       395       Cable Saws       1116       Chucks, Extension       1091, 1096         Bryant Flush Receptacles       609, 610       Cable Solder       552       Christmas Tree Outfits       411         Bryant Receptacles       588, 589, 593-       Cable Splitting Knives       1116       Circuit Breakers, A.C. and D.C129-140         Bryant Rosettes, Porcelain       602, 603       Cable Strippers       1116       A.C. and D.C134         Bryant Sockets       574-579, 585, 586, 588, 588, 589, 590       Cable, Switchboard       947, 957       Circuit Breakers, Carbon       129-140         Circuit Breakers, Carbon       129-140       Circuit Breakers, Carbon       129-140         Cable, Switchboard       947, 957       Circuit Breakers, Carbon       129-140         Clamp Bushings       781	Brackets, Phantom 1026 Brackets, Pole 1023 Brackets, Presteel 1107 Brackets, Presteel 1019 Brackets, Spreader 1022, 1024 Brackets, Standard 538 Brackets, Switchboard 490 Brackets, Telephone 74 Brackets, Telephone 1006, 1027 Brackets, Wall 485, 488-490, 499, 502, 1019-1022, 1054 Brackets, Wood 1006 Bracket Tubes 490 Brake Arms, Iron 1025 Branch Boxes, D. & W 764 Brascolites 514-519 Brass Cleats 1160 Brass Connectors, Insulated 800 Brass Terminal Bushings 801 Break Arms 1024, 1025 Brewery Cord 956	Cables, Automobile.       230         Cable, Border Light       955         Cable Cars       1070         Cable, Circular Mills.       946, 949         Cable Clamps, Long-Saut       1057         Cable Clips, Boston       1055         Cable Clips, Metropolitan       1055         Cable Clips, Metropolitan       1055         Cable, Deck       955         Cable Duct Shields       1076         Cable, Elevator       955         Cable Grips       1060         Cable Hangers       806, 1055         Cable Hangers       806, 1055         Cable Hooks       1058         Cable, Mining and Park       948         Cable, Moving Picture Machine       957         Cable Racks       1070         Cable Reel Jacks       1070         Cable Reel Stands       1075         Cable Reel Wheels       1073         Cable Rings, Aerial       1056	Carts, Tool. 1072 Car Wire
Bryant Flush Receptacles	Brackets, Phantom 1026 Brackets, Pole 1023 Brackets, Presteel 1107 Brackets, Prussian Hook 1019 Brackets, Spreader 1022, 1024 Brackets, Standard 538 Brackets, Switchboard 490 Brackets, Telephone 74 Brackets, Transposition 1006, 1027 Brackets, Wall 485, 488-490, 499, 502, 1019-1022, 1054 Brackets, Wood 1006 Bracket Tubes 490 Brake Arms, Iron 1025 Branch Boxes, D. & W 764 Brascolites 514-519 Brass Cleats 1160 Brass Connectors, Insulated 800 Brass Terminal Bushings 801 Break Arms 1024, 1025 Brewery Cord 956 Bridle Rings 1056, 1057	Cables, Automobile.       230         Cable, Border Light       955         Cable Cars       1070         Cable, Circular Mills.       946, 949         Cable Clamps, Long-Saut       1057         Cable Clips, Boston       1055         Cable Clips, Metropolitan       1055         Cable, Deck       955         Cable, Deck       955         Cable, Elevator       955         Cable Grips       1060         Cable Hangers       806, 1055         Cable Hangers, Marlin       1055         Cable Hooks       1058         Cable, Mining and Park       948         Cable, Moving Picture Machine       957         Cable Reel Jacks       1070         Cable Reel Stands       1075         Cable Reel Jacks       1075         Cable Reel Wheels       1073         Cable Rings, Aerial       1056         Cable Rings, Pierce       1056	Carts, Tool. 1072 Car Wire 959 Cases, Carrying 188 Cases, Electrician's 1097 Cases, Plug Fuse 754 Casing, Rubber 657 Ceiling Brackets 500, 501, 505-507, 1001, 1014, 1015 Ceiling Buttons 688 Ceiling Sockets 636 Ceiling Units 500, 501, 505-507, 509-511 Cement, Commutator 553 Cement Mico 571 Central Battery Telephones 53 Chafing Dish 375 Chain, Oneida 1121 Chain Pull Receptacles 784 Chain, Pull Socket 572, 573 Changers, Lamp 428 Chase Couplings 803 Chase Nipples 803 Chau-Phone 232 Chisels 1106, 1109
Bryant Plugs       604-608       Cable Splitting Knives       1116       Circuit Breakers, A.C. and D.C129-140         Bryant Receptacles       588, 589, 593-       Cable, Stage       956       Circuit Breaker Attachments,         598, 613, 614       Cable Strippers       1116       A.C. and D.C134         Bryant Rosettes, Porcelain       602, 603       Cables, Suburban       948       Circuit Breakers, Carbon       129-140         Cable, Switchboard       947, 957       Circuit Breakers, Carbon       129-140       Circuit Breakers, Carbon       129-140         Cable, Switchboard       947, 957       Circuit Breakers, Carbon       129-140       Circuit Breakers, Carbon       129-140         Cable, Switchboard       947, 957       Circuit Breakers, Carbon       129-140       Circuit Breakers, Carbon       129-140         Cable, Switchboard       947, 957       Circuit Breakers, Carbon       129-140       Circuit Breakers, Carbon       129-140         Cable, Switchboard       947, 957       Circuit Breakers, Carbon       129-140       Circuit Breakers, Carbon       129-140         Cable, Switchboard       947, 957       Circuit Breakers, Carbon       129-140       Circuit Breakers, Carbon       129-140         Cable, Switchboard       947, 957       Circuit Breakers, Carbon       129-140 <td>Brackets, Phantom 1026 Brackets, Pole 1023 Brackets, Presteel 1107 Brackets, Prussian Hook 1019 Brackets, Spreader 1022, 1024 Brackets, Standard 538 Brackets, Switchboard 490 Brackets, Telephone 74 Brackets, Transposition 1006, 1027 Brackets, Wall 485, 488-490, 499, 502, 1019-1022, 1054 Brackets, Wood 1006 Bracket Tubes 490 Brake Arms, Iron 1025 Branch Boxes, D. &amp; 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Reinforced Cords.       950, 951         Relay Boxes       48         Relays, A.C.       150-153         Relays, A.C., Overload       150         Relays, D.C. and A.C.       153         Relays, D.C., Reverse Current 151, 152       153         Relays, Solenoid Control       153         Relays, Telegraph       1154         Renewals, Battery, Edison       244-247         Resin Core Solder       552         Resistance Units       121         Rheostats       114, 116-119, 124, 125         Rheostats, Battery Charging       174         Rheostats, Field       124, 125         Rheostats, Field       124, 125         Rheostats, Speed Regulating       115, 116	Sand Paper         .553           Samovar, Tea         .375           Samson Cordage         .1121           Samson Spot Cord         .1121           Sash Cord         .1121           Saws, Cable         .1116           Saws, Hand         .104           Scissors, Electrician's         .1086           Scrapers         .1116           Scoopes         .1065           Screw Anchors         .1053           Screw Driver and Knife, Electrician's         .1086           Screw Driver Sets         .1096           Screw Driver Sets         .1096           Screw Driver Sets         .1096           Screw Driver Sets         .1096           Screw Driver Sets         .1076	Silent Call Signal Systems       267, 269         Silk, Oiled.       568         Silk Shade Portable       477         Simplex Ground Wires       953         Simplex Jacks       1074         Skids, Manhole       1075         Skinners, Wire       1086         Slack Tackle       1081         Sleeve and Wire Clamps       1089         Sleeves, Paper       558         Sleeves, Copper       966         Sleeves, Tinned Steel       966         Sleeving, Cotton       554         Slicks       1066         Slow-Burning Wire       942         Snap Switch Bases       783         Snap Switches       617-619, 779
Reinforced Cords.       950, 951         Relay Boxes       48         Relays, A.C.       150-153         Relays, A.C., Overload       150         Relays, D.C. and A.C.       153         Relays, D.C., Reverse Current.       151, 152         Relays, Solenoid Control       153         Relays, Telegraph       1154         Renewals, Battery, Edison       244-247         Resin Core Solder       552         Resistance Units       121         Rheostats       114, 116-119, 124, 125         Rheostats, Battery Charging       174         Rheostats, Field       124, 125         Rheostats, Field       124, 125         Rheostats, Speed Regulating       115, 116         Ribbon, Fuse       752	Sand Paper         .553           Samovar, Tea         .375           Samson Cordage         .1121           Samson Spot Cord         .1121           Sash Cord         .1121           Saws, Cable         .1116           Saws, Hand         .104           Scissors, Electrician's         .1086           Scrapers         .1116           Scoopes         .1065           Screw Anchors         .1053           Screw Driver and Knife, Electrician's         .1086           Screw Driver Sets         .1096           Screw Driver Sets         .1096           Screw Driver Sets         .1096           Screw Duct Rods         .1076           Screws, Insulated Fork         .1042	Silent Call Signal Systems       267, 269         Silk, Oiled.       568         Silk Shade Portable       477         Simplex Ground Wires       953         Simplex Jacks.       1074         Skids, Manhole       1075         Skinners, Wire       1086         Slack Tackle       1081         Sleeve and Wire Clamps       1089         Sleeves, Paper       558         Sleeves, Copper       966         Sleeves, Tinned Steel       966         Sleeving, Cotton       554         Slicks       1066         Slow-Burang Wire       942         Snap Switch Bases       783         Snap Switches       617-619, 779         Snap Switches, Perkins       617-619
Reinforced Cords.       950, 951         Relay Boxes       48         Relays, A.C.       150-153         Relays, A.C., Overload       150         Relays, D.C. and A.C.       153         Relays, D.C., Reverse Current       151, 152         Relays, Solenoid Control       153         Relays, Telegraph       1154         Renewals, Battery, Edison       244-247         Resin Core Solder       552         Resistance Units       121         Rheostats       114, 116-119, 124, 125         Rheostats, Battery Charging       174         Rheostats, Field       124, 125         Rheostats, Field, D.C.       124, 125         Rheostats, Speed Regulating       115, 116         Ribbon, Fuse       752         Rigid Pipe Conduit       794	Sand Paper         .553           Samovar, Tea         .375           Samson Cordage         .1121           Samson Spot Cord         .1121           Sash Cord         .1121           Saws, Cable         .1116           Saws, Hand         .104           Scissors, Electrician's         .1086           Scrapers         .1116           Scoopes         .1065           Screw Anchors         .1053           Screw Driver and Knife, Electrician's         .1086           Screw Driver Sets         .1096           Screw Driver Sets         .1096           Screw Driver Sets         .1096           Screw Duct Rods         .1076           Screws, Insulated Fork         .1042           Screws, Lag         .1048	Silent Call Signal Systems       267, 269         Silk, Oiled       568         Silk Shade Portable       477         Simplex Ground Wires       953         Simplex Jacks       1074         Skids, Manhole       1075         Skinners, Wire       1086         Slack Tackle       1081         Sleeve and Wire Clamps       1089         Sleeves, Paper       558         Sleeves, Copper       966         Sleeves, Tinned Steel       966         Sleeving, Cotton       554         Slicks       1066         Slow-Burning Wire       942         Snap Switch Bases       783         Snap Switches       617-619, 779         Snap Switches, Perkins       617-619         Snap Switches, Surface
Reinforced Cords.       950, 951         Relay Boxes       48         Relays, A.C.       150-153         Relays, A.C., Overload       150         Relays, D.C. and A.C.       153         Relays, D.C., Reverse Current       151, 152         Relays, Solenoid Control       153         Relays, Telegraph       1154         Renewals, Battery, Edison       244-247         Resin Core Solder       552         Resistance Units       121         Rheostats       114, 116-119, 124, 125         Rheostats, Battery Charging       174         Rheostats, Field       124, 125         Rheostats, Field, D.C.       124, 125         Rheostats, Speed Regulating       115, 116         Ribbon, Fuse       752         Rigid Pipe Conduit       794         Ring Bolts       1056	Sand Paper         .553           Samovar, Tea         .375           Samson Cordage         .1121           Samson Spot Cord         .1121           Saws, Cable         .1116           Saws, Cable         .1116           Scissors, Electrician's         .1086           Scrapers         .116           Scoopes         .1065           Screw Anchors         .1053           Screw Driver and Knife, Electrician's         .1086           Screw Driver Sets         .1096           Screw Driver Sets         .1096           Screw Duct Rods         .1076           Screws, Insulated Fork         .1042           Screws, Lag         .1048           Screw Pins         .1013	Silent Call Signal Systems       267, 269         Silk, Oiled       568         Silk Shade Portable       477         Simplex Ground Wires       953         Simplex Jacks       1074         Skids, Manhole       1075         Skinners, Wire       1086         Slack Tackle       1081         Sleeve and Wire Clamps       1089         Sleeves, Paper       558         Sleeves, Copper       966         Sleeves, Tinned Steel       966         Sleeving, Cotton       554         Slicks       1066         Slow-Burning Wire       942         Snap Switch Bases       783         Snap Switches       617-619,779         Snap Switches, Perkins       617-619         Snap Switches, Surface       617,619,697-707
Reinforced Cords.       950, 951         Relay Boxes       48         Relays, A.C.       150-153         Relays, A.C., Overload       150         Relays, D.C. and A.C.       153         Relays, D.C., Reverse Current       151, 152         Relays, Solenoid Control       153         Relays, Telegraph       1154         Renewals, Battery, Edison       244-247         Resin Core Solder       552         Resistance Units       121         Rheostats       114, 116-119, 124, 125         Rheostats, Battery Charging       174         Rheostats, Field       124, 125         Rheostats, Field, D.C.       124, 125         Rheostats, Speed Regulating       115, 116         Ribbon, Fuse       752         Rigid Pipe Conduit       794         Ring Bolts       1056         Ringers, Telephone       52, 72	Sand Paper         .553           Samovar, Tea         .375           Samson Cordage         .1121           Samson Spot Cord         .1121           Sash Cord         .1121           Saws, Cable         .1116           Saws, Hand         .104           Scissors, Electrician's         .1086           Scrapers         .1116           Scoopes         .1065           Screw Anchors         .1053           Screw Driver and Knife, Electrician's         .1086           Screw Driver Sets         .1096           Screw Driver Sets         .1096           Screw Driver Sets         .1096           Screw Duct Rods         .1076           Screws, Insulated Fork         .1042           Screws, Lag         .1048	Silent Call Signal Systems       267, 269         Silk, Oiled       568         Silk Shade Portable       477         Simplex Ground Wires       953         Simplex Jacks       1074         Skids, Manhole       1075         Skinners, Wire       1086         Slack Tackle       1081         Sleeve and Wire Clamps       1089         Sleeves, Paper       558         Sleeves, Copper       966         Sleeves, Tinned Steel       966         Sleeving, Cotton       554         Slicks       1066         Slow-Burning Wire       942         Snap Switch Bases       783         Snap Switches       617-619, 779         Snap Switches, Perkins       617-619         Snap Switches, Surface
Reinforced Cords.       950, 951         Relay Boxes       48         Relays, A.C.       150-153         Relays, A.C., Overload       150         Relays, D.C. and A.C.       153         Relays, D.C., Reverse Current.       151, 152         Relays, Solenoid Control       153         Relays, Telegraph       1154         Renewals, Battery, Edison.       244-247         Resin Core Solder       552         Resistance Units       121         Rheostats       114, 116-119, 124, 125         Rheostats, Battery Charging       174         Rheostats, Field       124, 125         Rheostats, Field       124, 125         Rheostats, Speed Regulating       115, 116         Ribbon, Fuse       752         Rigid Pipe Conduit       794         Rings Bolts       1056         Rings, Bridle       1056, 1057         Rings, Rubber       657	Sand Paper         553           Samovar, Tea         375           Samson Cordage         1121           Samson Spot Cord         1121           Saws, Cable         1116           Saws, Cable         1116           Scissors, Electrician's         1086           Scrapers         1116           Scoopes         1065           Screw Anchors         1053           Screw Driver and Knife, Electrician's         1086           Screw Driver Sets         1096           Screw Driver Sets         1096           Screw Duct Rods         1076           Screws, Insulated Fork         1042           Screws, Lag         1048           Screw Pins         1013           Screws, Wood         1051	Silent Call Signal Systems         267, 269           Silk, Oiled.         568           Silk Shade Portable         477           Simplex Ground Wires         953           Simplex Jacks         1074           Skids, Manbole         1075           Skinners, Wire         1086           Slack Tackle         1081           Sleeve and Wire Clamps         1089           Sleeves, Paper         555           Sleeves, Copper         966           Sleeves, Tinned Steel         966           Sleeves, Tinned Steel         966           Sleeves, Tinned Steel         966           Slew-Burning Wire         942           Snap Switch Bases         783           Snap Switches         617-619, 779           Snap Switches, Perkins         617-619           Snap Switches, Surface         617, 619, 697-707           Sneak Ceils         759           Socket Adapters         689           Socket Bushings         657
Reinforced Cords.       950, 951         Relay Boxes       48         Relays, A.C.       150-153         Relays, A.C., Overload       150         Relays, D.C. and A.C.       153         Relays, D.C., Reverse Current. 151, 152       153         Relays, Solenoid Control       153         Relays, Telegraph       1154         Renewals, Battery, Edison       244-247         Resin Core Solder       552         Resistance Units       121         Rheostats       114, 116-119, 124, 125         Rheostats, Battery Charging       174         Rheostats, Field       124, 125         Rheostats, Field       124, 125         Rheostats, Speed Regulating       115, 116         Ribbon, Fuse       752         Rigid Pipe Conduit       794         Ringers, Telephone       52, 72         Rings, Bridle       1056, 1057         Rings, Rubber       657         Rings, Socket       657	Sand Paper         .553           Samovar, Tea         .375           Samson Cordage         .1121           Samson Spot Cord         .1121           Sash Cord         .1121           Saws, Cable         .1116           Saws, Hand         .1104           Scissors, Electrician's         .1086           Scrapers         .1116           Scoopes         .1053           Screw Anchors         .1053           Screw Driver and Knife, Electrician's         .1086           Screw Driver and Knife, Electrician's         .1086           Screw Driver Sets         .1096           Screw Driver Sets         .1096           Screw Duct Rods         .1076           Screws, Insulated Fork         .1042           Screws, Lag         .1048           Screws, Wood         .1051           Scrulix Anchors         .1038           Searchlights         .177, 178           Searchlights, Store Window         .473, 474	Silent Call Signal Systems         267, 269           Silk, Oiled.         568           Silk Shade Portable         477           Simplex Ground Wires         953           Simplex Jacks         1074           Skids, Manbole         1075           Skinners, Wire         1086           Slack Tackle         1081           Sleeve and Wire Clamps         1089           Sleeves, Paper         558           Sleeves, Copper         966           Sleeves, Tinned Steel         966           Sleeves, Tinned Steel         966           Sleeves, Tinned Steel         966           Slewing, Cotton         554           Slicks         1066           Slow-Burning Wire         942           Snap Switch Bases         783           Snap Switches, Perkins         617-619, 779           Snap Switches, Surface         617, 619, 697-707           Sneak Ceils         759           Socket Adapters         689           Socket Bushings         657           Socket Clusters         692
Reinforced Cords.       950, 951         Relay Boxes       48         Relays, A.C.       150-153         Relays, A.C., Overload       150         Relays, D.C. and A.C.       153         Relays, D.C., Reverse Current.       151, 152         Relays, Solenoid Control       153         Relays, Telegraph       1154         Renewals, Battery, Edison.       244-247         Resin Core Solder       552         Resistance Units       121         Rheostats       114, 116-119, 124, 125         Rheostats, Battery Charging       174         Rheostats, Field       124, 125         Rheostats, Field       124, 125         Rheostats, Speed Regulating       115, 116         Ribbon, Fuse       752         Rigid Pipe Conduit       794         Ring Bolts       1056         Ringers, Telephone       52, 72         Rings, Bridle       1056, 1057         Rings, Rubber       657         Rittenhouse Conduit Benders       1108	Sand Paper         553           Samovar, Tea         375           Samson Cordage         1121           Samson Spot Cord         1121           Sash Cord         1121           Saws, Cable         1116           Saws, Hand         1104           Scissors, Electrician's         1086           Scrapers         1116           Scoopes         1065           Screw Anchors         1053           Screw Driver and Knife, Electrician's         1086           Screw Driver Sets         1096           Screw Driver Sets         1096           Screw Duct Rods         1076           Screws, Insulated Fork         1042           Screws, Lag         1048           Screw Pins         1013           Screws, Wood         1051           Scrulix Anchors         1038           Searchlights         177, 178           Searchlights, Store Window         473, 474           Seats, Pole         1037	Silent Call Signal Systems       267, 269         Silk, Oiled.       568         Silk Shade Portable       477         Simplex Ground Wires       953         Simplex Jacks       1074         Skids, Manhole       1075         Skinners, Wire       1086         Slack Tackle       1081         Sleeve and Wire Clamps       1089         Sleeves, Paper       558         Sleeves, Copper       966         Sleeves, Tinned Steel       966         Sleeves, Tinned Steel       966         Sleeves, Tinned Steel       966         Sleeves, Tinned Steel       966         Slewing, Cotton       554         Slicks       1066         Slow-Burning Wire       942         Snap Switch Bases       783         Snap Switches, Perkins       617-619, 779         Snap Switches, Surface       617, 619, 697-707         Sneak Ceils       759         Socket Adapters       689         Socket Bushings       657         Socket Clusters       692         Socket Features       572, 573
Reinforced Cords.       950, 951         Relay Boxes       48         Relays, A.C.       150-153         Relays, A.C., Overload       150         Relays, D.C. and A.C.       153         Relays, D.C., Reverse Current. 151, 152       151         Relays, Solenoid Control       153         Relays, Telegraph       1154         Renewals, Battery, Edison       244-247         Resin Core Solder       552         Resistance Units       121         Rheostats       114, 116-119, 124, 125         Rheostats, Battery Charging       174         Rheostats, Field       124, 125         Rheostats, Field       124, 125         Rheostats, Field       124, 125         Rheostats, Speed Regulating       115, 116         Ribbon, Fuse       752         Rigid Pipe Conduit       794         Ring Bolts       1056         Ringers, Telephone       52, 72         Rings, Bridle       1056, 1057         Rings, Rubber       657         Rittenhouse Conduit Benders       1108         Rods, Anchor       1041	Sand Paper         553           Samovar, Tea         375           Samson Cordage         1121           Samson Spot Cord         1121           Sash Cord         1121           Saws, Cable         1116           Saws, Hand         1104           Scissors, Electrician's         1086           Scrapers         1116           Scoopes         1065           Screw Anchors         1053           Screw Driver and Knife, Electrician's         1086           Screw Driver Sets         1096           Screw Driver Sets         1096           Screw Driver Sets         1096           Screw Duct Rods         1076           Screws, Insulated Fork         1042           Screws, Lag         1048           Screw Pins         1013           Screws, Wood         1051           Scrulix Anchors         1038           Searchlights         177, 178           Searchlights, Store Window         473, 474           Seats, Pole         1037           Secondary Racks         1028	Silent Call Signal Systems         267, 269           Silk, Oiled         568           Silk Shade Portable         477           Simplex Ground Wires         953           Simplex Jacks         1074           Skids, Manhole         1075           Skinners, Wire         1086           Slack Tackle         1081           Sleeve and Wire Clamps         1089           Sleeves, Paper         558           Sleeves, Copper         966           Sleeves, Tinned Steel         966           Sleeving, Cotton         554           Slicks         1066           Slow-Burning Wire         942           Snap Switch Bases         783           Snap Switches         617-619, 779           Snap Switches, Perkins         617-619           Snap Switches, Surface         617, 619, 697-707           Sneak Ceils         759           Socket Adapters         689           Socket Bushings         657           Socket Clusters         692           Socket Features         572, 573           Socket Fittings         657
Reinforced Cords.       950, 951         Relay Boxes       48         Relays, A.C.       150-153         Relays, A.C., Overload       150         Relays, D.C. and A.C.       153         Relays, D.C., Reverse Current       151, 152         Relays, Solenoid Control       153         Relays, Telegraph       1154         Renewals, Battery, Edison       244-247         Resin Core Solder       552         Resistance Units       121         Rheostats       114, 116-119, 124, 125         Rheostats, Battery Charging       174         Rheostats, Field       124, 125         Rheostats, Field       124, 125         Rheostats, Speed Regulating       115, 116         Ribbon, Fuse       752         Rigid Pipe Conduit       794         Ring Bolts       1056         Ringers, Telephone       52, 72         Rings, Bridle       1056, 1057         Rings, Socket       657         Rittenhouse Conduit Benders       1108         Rods, Anchor       1041         Rods, Duct, Empire       1076	Sand Paper         553           Samovar, Tea         375           Samson Cordage         1121           Samson Spot Cord         1121           Sash Cord         1121           Saws, Cable         1116           Saws, Hand         1104           Scissors, Electrician's         1086           Scrapers         1116           Scoopes         1065           Screw Anchors         1053           Screw Driver and Knife, Electrician's         1086           Screw Driver Sets         1096           Screw Driver Sets         1096           Screw Duct Rods         1076           Screws, Insulated Fork         1042           Screws, Lag         1048           Screw Pins         1013           Screws, Wood         1051           Scrulix Anchors         1038           Searchlights         177, 178           Searchlights, Store Window         473, 474           Seats, Pole         1037           Secondary Racks         1028           Sectional Unit Sign         413	Silent Call Signal Systems         267, 269           Silk, Oiled         568           Silk Shade Portable         477           Simplex Ground Wires         953           Simplex Jacks         1074           Skids, Manhole         1075           Skinners, Wire         1086           Slack Tackle         1081           Sleeve and Wire Clamps         1089           Sleeves, Paper         558           Sleeves, Copper         966           Sleeves, Tinned Steel         966           Sleeves, Tinned Steel         966           Sleeving, Cotton         554           Slicks         1066           Slow-Burning Wire         942           Snap Switch Bases         783           Snap Switches, Perkins         617-619, 779           Snap Switches, Perkins         617-619           Snap Switches, Surface         617, 619, 697-707           Sneak Ceils         759           Socket Adapters         689           Socket Bushings         657           Socket Features         572, 573           Socket Fittings         657           Socket Handles         657
Reinforced Cords.       950, 951         Relay Boxes       48         Relays, A.C.       150-153         Relays, A.C., Overload       150         Relays, D.C. and A.C.       153         Relays, D.C., Reverse Current       151, 152         Relays, Solenoid Control       153         Relays, Telegraph       1154         Renewals, Battery, Edison       244-247         Resin Core Solder       552         Resistance Units       121         Rheostats       114, 116-119, 124, 125         Rheostats, Battery Charging       174         Rheostats, Field       124, 125         Rheostats, Field, D.C.       124, 125         Rheostats, Field, D.C.       124, 125         Rheostats, Speed Regulating       115, 116         Ribbon, Fuse       752         Rigid Pipe Conduit       794         Ring Bolts       1056         Ringers, Telephone       52, 72         Rings, Bridle       1056, 1057         Rings, Socket       657         Rittenhouse Conduit Benders       1108         Rods, Anchor       1041         Rods, Fiber       556	Sand Paper         553           Samovar, Tea         375           Samson Cordage         1121           Samson Spot Cord         1121           Sash Cord         1121           Saws, Cable         1116           Saws, Hand         1104           Scissors, Electrician's         1086           Scrapers         1116           Scoopes         1065           Screw Anchors         1053           Screw Driver and Knife, Electrician's         1086           Screw Driver Sets         1096           Screw Driver Sets         1096           Screw Driver Sets         1096           Screw Duct Rods         1076           Screws, Insulated Fork         1042           Screws, Lag         1048           Screw Pins         1013           Screws, Wood         1051           Scrulix Anchors         1038           Searchlights         177, 178           Searchlights, Store Window         473, 474           Seats, Pole         1037           Secondary Racks         1028	Silent Call Signal Systems         267, 269           Silk, Oiled         568           Silk Shade Portable         477           Simplex Ground Wires         953           Simplex Jacks         1074           Skids, Manhole         1075           Skinners, Wire         1086           Slack Tackle         1081           Sleeve and Wire Clamps         1089           Sleeves, Paper         558           Sleeves, Copper         966           Sleeves, Tinned Steel         966           Sleeving, Cotton         554           Slicks         1066           Slow-Burning Wire         942           Snap Switch Bases         783           Snap Switches         617-619, 779           Snap Switches, Perkins         617-619           Snap Switches, Surface         617, 619, 697-707           Sneak Ceils         759           Socket Adapters         689           Socket Bushings         657           Socket Clusters         692           Socket Features         572, 573           Socket Fittings         657
Reinforced Cords.       950, 951         Relay Boxes       48         Relays, A.C.       150-153         Relays, A.C., Overload       150         Relays, D.C. and A.C.       153         Relays, D.C., Reverse Current       151, 152         Relays, Solenoid Control       153         Relays, Telegraph       1154         Renewals, Battery, Edison       244-247         Resin Core Solder       552         Resistance Units       121         Rheostats       114, 116-119, 124, 125         Rheostats, Battery Charging       174         Rheostats, Field       124, 125         Rheostats, Field       124, 125         Rheostats, Speed Regulating       115, 116         Ribbon, Fuse       752         Rigid Pipe Conduit       794         Ring Bolts       1056         Ringers, Telephone       52, 72         Rings, Bridle       1056, 1057         Rings, Socket       657         Rittenhouse Conduit Benders       1108         Rods, Anchor       1041         Rods, Duct, Empire       1076	Sand Paper         553           Samovar, Tea         375           Samson Cordage         1121           Samson Spot Cord         1121           Saws, Cable         1116           Saws, Cable         1116           Saws, Hand         1104           Scissors, Electrician's         1086           Scrapers         1116           Scoopes         1065           Screw Anchors         1053           Screw Driver and Knife, Electrician's         1086           Screw Driver Sets         1096           Screw Driver Sets         1096           Screw Duct Rods         1076           Screws, Insulated Fork         1042           Screws, Lag         1048           Screw Pins         1013           Screws, Wood         1051           Scrulix Anchors         1038           Searchlights, Store Window         473, 474           Seats, Pole         1037           Secondary Racks         1028           Sectional Unit Sign         413           Self-Locking Blocks         1081, 1085	Silent Call Signal Systems         267, 269           Silk, Oiled         568           Silk Shade Portable         477           Simplex Ground Wires         953           Simplex Jacks         1074           Skids, Manhole         1075           Skinners, Wire         1086           Slack Tackle         1081           Sleeve and Wire Clamps         1089           Sleeves, Paper         558           Sleeves, Copper         966           Sleeving, Cotton         554           Slicks         1066           Slow-Burning Wire         942           Snap Switch Bases         783           Snap Switches, Perkins         617-619, 779           Snap Switches, Perkins         617-619           Snap Switches, Surface         617, 619, 697-707           Sneak Ceils         759           Socket Adapters         689           Socket Bushings         657           Socket Features         572, 573           Socket Fittings         657           Socket Parts         572, 573, 631, 637
Reinforced Cords.       950, 951         Relay Boxes       48         Relays, A.C.       150-153         Relays, A.C., Overload       150         Relays, D.C. and A.C.       153         Relays, D.C., Reverse Current       151, 152         Relays, Solenoid Control       153         Relays, Telegraph       1154         Renewals, Battery, Edison       244-247         Resin Core Solder       552         Resistance Units       121         Rheostats       114, 116-119, 124, 125         Rheostats, Battery Charging       174         Rheostats, Field       124, 125         Rheostats, Field       124, 125         Rheostats, Speed Regulating       115, 116         Ribbon, Fuse       752         Rigid Pipe Conduit       794         Rings Bolts       1056         Ringers, Telephone       52, 72         Rings, Bridle       1056, 1057         Rings, Rubber       657         Rittenhouse Conduit Benders       1108         Rods, Anchor       1041         Rods, Duct, Empire       1076         Rods, Fiber       556         Rods, Ground       1040         Rods, Hard Rubber </td <td>Sand Paper         .553           Samovar, Tea         .375           Samson Cordage         .1121           Samson Spot Cord         .1121           Sash Cord         .1121           Saws, Cable         .1116           Saws, Hand         .104           Scissors, Electrician's         .1086           Scrapers         .1116           Scoopes         .1053           Screw Anchors         .1053           Screw Driver and Knife, Electrician's         .1086           Screw Driver and Knife, Electrician's         .1086           Screw Driver Sets         .1096           Screw Driver Sets         .1096           Screw Duct Rods         .1076           Screws, Insulated Fork         .1042           Screws, Lag         .1048           Screw Pins         .1013           Screws, Wood         .1051           Screws, Wood         .1051           Screws, Wood         .1051           Scearchlights         .177, 178           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#### THE

# Western Electric Company

#### TO ITS MERCHANT-CUSTOMERS

#### We Are Selling the Idea

The Western Electric extensive national advertising, carried on in the popular magazines throughout the year, is made up of advertisements that may well be styled Electrical Educational Publicity. They constitute a policy that is different from the advertising of most manufacturers and absolutely unique among jobbers.

In this Western Electric publicity the main theme—the big thought—is to sell the idea "Do It Electrically." Thus, in talking to the woman, it points to electricity as "the answer to the servant problem"; in talking to the man, it asks him if he is giving his wife a square deal when he fails to equip his home with up-to-date housekeeping appliances.

This advertising is intended, first of all, to make more users of electricity. It forms the Western Electric's contribution to the industry. It is not altruistic. We do it because we believe that what is good for the industry is good for us.

# Are You Selling the Goods?

Many people in your locality are reading our advertising. They are learning to want to "Do It Electrically." They will look for appliances bearing the name Western Electric. If this publicity is to mean increased business for your store, it is up to you to make it easy for these people to buy what they want.

In the following pages, you will find reproductions of our complete line of free selling helps, designed for your use.

There are ready-to-run newspaper printing plates with room for your name and address; small envelope size folders, display cards and lantern slides to use in your local motion picture theatre, all of which we will imprint with your name; and sets of window display material with instructions for making your show window a real business puller.

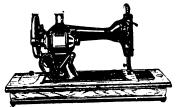
If the sales helps shown here do not meet with your ideas and local conditions, let us prepare something especially designed for your use.

Put these sales helps to work for you; tie up with this magazine publicity and proclaim your store the place to buy this nationally advertised line of quality products.

Order by Number

#### PORTABLE SEWING MACHINES

Newspaper Printing Plates



SM-2



SM-15



SM-16



SM-3



SM-7



SM-8



SM-5



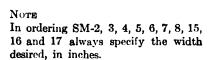
SM-17



SM-4



SM-6





SM-9 Double Column 7 inches high



SM-10 Double Calumn 7 inches high



SM-11
Single Column
7 inches high
Digitized by



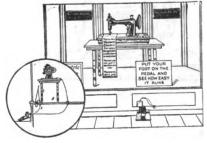
SM12
Double Column
10 inches high
Advertising

#### PORTABLE SEWING MACHINES

Window Displays



W-109



W-113

#### Display Card



C-709

Small Folder



B-131

#### Lantern Slides



LS-542



LS-545

# For Bill and Letter Heads

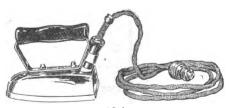


SM-14

Furnished in Three Sizes, 1 Inch, 1¼ Inches and 2¼ Inches Wide Specify size wanted

#### **IRONS**

#### Newspaper Printing Plates



EI-3
Furnished in Three Sizes, 2½ Inches, 3½ Inches and 4½ Inches Wide
Specify size wanted





EI-8 Furnished in Two Sizes, 1 Inch and 2½ Inches Wide

#### **IRONS**

#### Newspaper Printing Plates



E1-4 Double Column 7 inches high



E1-6 Single Column 7 inches high



E1-5 Double Column 4 inches high



E1-7 Single Column 5¼ inches high

#### A NOVEL ADVERTISING CARD

For Mailing Out with Monthly Bills, Etc.



B-142

 $\leftarrow$  These  $\rightarrow$ 

two pictures show the card as it looks when it is received (on the left) and as it looks after heat has been applied to the back (see picture on the right). Actual size of cards is 3 x 4½ inches.



Lantern Slides



LS-543

C-710

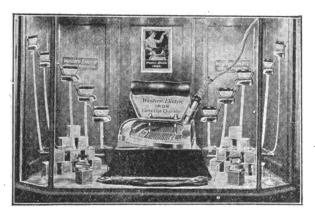


LS-617



#### **IRONS**

#### Window Display



W-114

# Cut-out Western Electric GETS HOT QUICKLY

This is an integral part of window display outfit W-114. After using in the window, it can be used on your store counter. The little girl is shown to give an idea of the size of the cut-out.

#### WASHING MACHINES Newspaper Printing Plates



Double Column 63/4 inches high



W-2 Single Column 6½ inches high



Single Column 61/2 inches high



W-8 Single Column 6½ inches high



W-9 Double Column 7 inches high



W-10 Double Column 7 inches high



W-11



W-11
Double Column
7 inches high lightized by 7 inches high

#### WASHING MACHINES

#### **Newspaper Printing Plates**



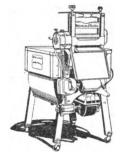
W-14 Double Column 7 Inches high



Double Column 7 inches high



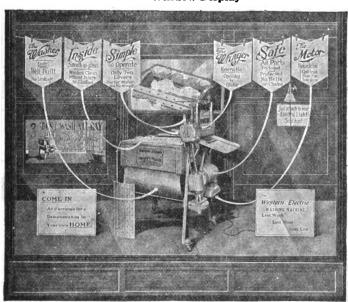
W-27 Double Column 7 inches high



W-28 Furnished in three sizes 11/8", 21/4", and 4" wide Specify size wanted

Lantern Slides

#### Window Display



₩-31

Display Card





LS-614



LS-615

C-702





# WASHING MACHINES

Small Folders



B-144



B-145



B-141



B-146

# FANS Newspaper Printing Plates



F-25
Double Column
7 inches high



F-43
Double Column
7 inches high



F-54
Double Column
7 inches high



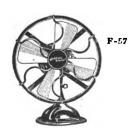
F-55 Double Column 7 inches high



F-44
Single Column
6¼ inches high
Advertising



F-56 Single Column 7 inches high





F-58



16

#### **FANS**

#### Lantern Slides









LS-549

LS-550

LS-517

LS-518

Window Cards







C-704

Small Folder



B-139

#### Vacuum Cleaners

#### Lantern Slides



LS-526



LS-527

Newspaper Printing Plates



V-112 Single Column 4¼" high



V-113 Single Column 4¼" high



V-111 Double Column 6¾" high





V-114 Single Column Single Column 6½° high 6½° high

Advertising

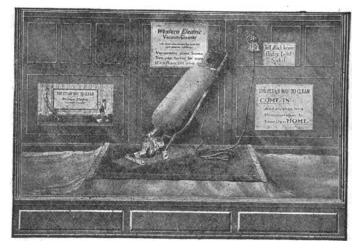
# **VACUUM CLEANERS**

#### Newspaper Printing Plate



Furnished in three sizes: 34, 11/2 and 21/4 inches wide Specify size wanted

# Window Display



W-74

#### Window Card



C-703

#### Small Folder



B-147

# **ELECTRIC RANGES**

#### Newspaper Printing Plates



ER-3 Single Column 7 inches high Advertising



ER-4 Single Column 7 inches high



ER-5 Single Column 7 inches high 13



ER-9 Single Column



ER-6 Single Column
7 inches high: Touble Column

# **ELECTRIC RANGES**

#### Newspaper Printing Plates



ER-11 Single Column 7 inches high



ER-12 Single Column 7 inches high



ER-13 Single Column 7 inches high



ER-14 Single Column 7 inches high



ER-7 Double Column 7 inches high



ER-8 Double Column 7 inches high

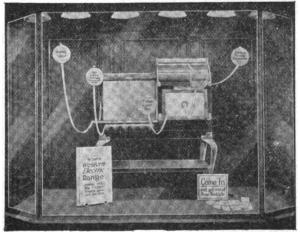


ER-10 Double Column 7 inches high



ER-15
Furnished in three sizes
1 inch, 2½ inches and 4
inches wide
Specify size wanted

#### Window Display



W-105

#### Small Folder



B-140



# **ELECTRIC RANGES**

#### Lantern Slides











LS-611

LS-609

LS-610

LS-539

LS-608

#### **DISHWASHERS**

Newspaper Printing Plate



Furnished in three sizes, ¼ inch, 2½ inch and 4 inch wide

Small Folder



B-135

Lantern Slide



LS-548

#### Window Display



W-102

Digitized by Google

# **VIBRATORS**

#### Newspaper Printing Plate



VR-1 Furnished in three sizes 1¾ inches, 2¼ inches and 4 inches wide



VR-2 Furnished in three sizes 1¾ inches, 2¼ inches and 4 inches wide

#### Lantern Slide



LS-543

#### Small Folder



B-134

# SEWING MACHINE MOTORS

Newspaper Printing Plates



SM-1 **S inc**hes wide, 5 inches high



SM-18 Furnished in two sizes 1¼ inches and 2¼ inches wide



SM-19 Ac:ual Size



Advertising

# **SEWING MACHINE MOTORS**

Small Folders

Lantern Slide



LS-540



B-115



B-148

#### **HEATING PADS**

Newspaper Printing Plates



HP-1 Double Column 7 inches high



HP-2 Single Column 7 inches high



HP-3
Furnished in two sizes
1½ inches and 2½ inches wide
Specify size wanted

#### Lantern Slide



LS-546

# **TOASTERS**

#### Newspaper Printing Plates



ET-1 Double Column 7 inches high Advertising



ET-2 Single Column 7 inches high



ET-3
Furnished in two sizes
1¼ inches and 2¼ inches wide
Specify size wanted

#### Lantern Slide



LS-529 ·



#### FARM LIGHTING PLANTS

Newspaper Printing Plates



FLP-25 Single Column 7 Inches High

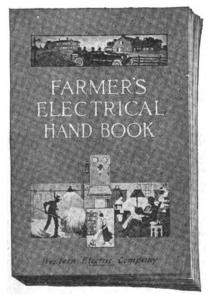


FLP-26 Single Column 7 Inches High For Bill or Letter Heads



FLP-24 Actual Size

Handbook



B-136

Small Folder



FL-28

Note: For sales agents engaged in selling Western Electric farm lighting plants, there is available a number of other small folders designed to create interest in the plants and their accessories. Complete details will be furnished upon request by your nearest house.

#### SEASONABLE WINDOW DISPLAYS



For Election Day W-106



For Thanksgiving Day W-104



For Christmas W-107

#### GENERAL FOLDER

This folder describes the seven leading Western Electric Quality Products—Washing Machine, Vacuum Cleaner, Sewing Machine, Dish Washer, Iron, Toaster and Sunbeam Mazda Lamps.



B-130

#### FARM LIGHTING PLANTS

Newspaper Printing Plates



FLP-27 Double Column 7 Inches High Advertising



FLP-28
Double Column
7 Inches High
24



FLP-29
Double Column
Digitized by Tinches High

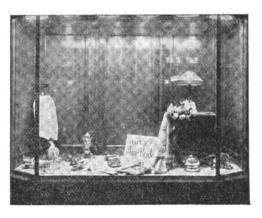
# SEASONABLE WINDOW DISPLAYS



An Easter Window W-97



For Decoration Day W-112



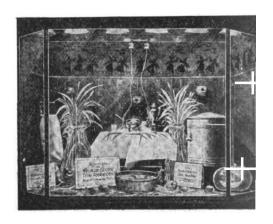
For June Weddings . W-99



For Fourth of July W-101



For Labor Day W-100



Digitized by Google For Hallowe'en W-103

#### **BUSINESS MOTORS**

#### Newspaper Printing Plates



Manufacture (September 1997)

KT Motor Furnished in three sizes: KT-1½", 1½" and 2"

Half-tone electrotypes in various sizes—of Type KT, KS, RI, SA, RC, RCS, and SD motors and of motor generator charging outfits (MG) are available. Order by specifying type of motor and width of electrotype desired.

#### Lantern Slides

For Bill and Letter Heads



WS 1 Actual size







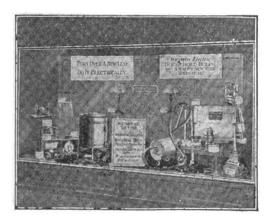
LS-533

#### SEASONABLE WINDOW DISPLAYS

Use your window to tie up to current events—either national or local. The window displays here illustrated offer seasonable suggestions. Order the outfits by number.

If there is any special event in your town for which you desire a suitable window—such as an "Old Home Week"—write to us. We will be glad to prepare a display.

#### Write for Our Window Display Service Book



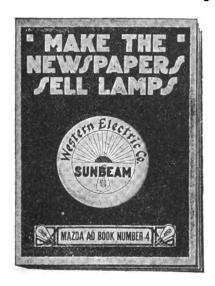
For New Year's W-108



For Washington's Birthday W-111
Digitized by

#### SUNBEAM MAZDA LAMPS

#### Newspaper Printing Plates



#### Write for

This Mazda Ad Book No. 4. It contains a large number of reproductions of live, snappy newspaper advertisements that will keep your stock of Sunbeam Mazdas constantly on the move.

#### POINTERS ON ORDERING SALES HELPS

#### NEWSPAPER PRINTING PLATES

Standard ready-to-use advertisements—specify number only, when ordering, as V-112 or SM-9.

Standard printing plates for making up your own advertisements always specify width, as SM-4, 11/4 inches wide, or W-28, 21/4 inches wide.

Special plates—DO NOT ORDER AS "COLUMN" OR "DOUBLE COLUMN" plates—always give both dimensions of space available width first, height second.

Electrotype is the name given to a copy of either a halftone or line plate—don't use it to distinguish. For newspaper work, line plates are preferable, but coarse screen half-tones can be supplied.

If half-tones are required for catalogs, tell us the kind of paper (rough or smooth) that is to be used.

**SMALL FOLDERS** DISPLAY CARDS and LANTERN SLIDES

> In ordering any of these with your imprint, give name, address, telephone number, etc., just as you want them to appear. In ordering printed matter be sure to specify quantity desired.



#### **INTER-PHONES**

"Inter-phones" is a trade name adopted by the Western Electric Company for what are generally known as intercommunicating telephones. They are special telephones designed to meet the requirements of service from room to room in a building or possibly from house to barn or garage. They have been designed by skilled telephone engineers especially for such use and are not adapted for outside telephone service.

#### For the Information of Customers

Operating telephone companies, as a rule, do not permit connections with their wires, switchboards or telephones, of any apparatus or attachments not owned or maintained by them.

#### **Application**

Inter-phones are intended to provide telephonic communication between various points in the home, factory or plant, as for example:

In the home-between

Living-room Bedroom Library

Nursery Servants' quarters

Kitchen

Stable or garage

Etc.

In a business organization—between

President's office General manager Superintendent Bookkeeper Shipping clerk Foreman Cashier Etc.

#### Operation

A combination formed by connecting together a number of Inter-phones is called an Inter-phone system. Each system may be considered as a small private telephone exchange requiring neither switchboard nor operator. Communication—that is, ringing the station desired and conversing with the person answering—can be established by merely depressing a push button for a few seconds, holding the receiver to the ear and talking into the transmitter.

# Inter-phone Systems

To meet the different conditions in home and business, various Inter-phone systems have been designed, which differ in the number of instruments that can be connected, the kind of service they will give, the appearance of the sets—and the price. The quality of the apparatus for each system is of the highest and the difference in price is due to the fact that the service rendered by the various systems necessitates Inter-phones that differ in structure.

# Apparatus Required

All Western Electric Inter-phone systems are simple and consist primarily of the following apparatus:

- 1. Inter-phones.
- 2 Batteries to furnish current for ringing and talking.
- 3. Wire or cable to connect Inter-phones and batteries.
- 4. Installing material (usually furnished by the installer) for connecting and fastening Inter-phones, cable (or wire) and batteries.

## Types of Inter-phones

Three different types of Inter-phones to suit different conditions and tastes can be furnished: Wall Inter-phones, desk Inter-phones and hand set Inter-phones, which can be used interchangeably in the same system except when otherwise stated.

Digitized by

#### INTER-PHONE SYSTEMS

In order to assist our customers in selecting a system best adapted to their requirements the following list has been compiled:

Inter-phone System Adapted to Business Organizations, Factories, Stores, Institutions, Large Residences, etc. The Following Requirements Will Be Met.

- 1. More than one conversation can take place simultaneously.
- 2. Any station can ring selectively any other station in the system instantaneously.
- 3. Quality of apparatus, operation, and appearance, the highest grade obtainable.

System No. 1.	3 up to 24 stations	Page 31
---------------	---------------------	---------

From any station it is possible to select, ring, and talk individually to any other station. As many separate conversations can be carried on simultaneously as there are pairs of Inter-phones connected.

Inter-phone Systems for Residences, Banks, Institutions, Warehouses, Stores, or Other Mercantile Establishments Where Conversations Are Less Frequent. The Systems Are Reliable in Operation, the Apparatus Pleasing in Appearance and Moderate in Cost. Each System is Limited to One Conversation at a Time.

System No. 11.	3 up to 12 stations.	<b>32</b>

From any station it is possible to select and ring any one of the other stations. One conversation can be carried on at a time.

System No. 12.	3 up to 12 stations	33

which are connected a number of other Inter-phones called "Outlying Stations."

It is possible to ring from the master station any one of the outlying stations selectively, or the master station from each of the outlying stations. One conversation can be carried on at a time.

A simple system. The bells of all stations will ring simultaneously whenever a call is made from any one of the stations. The various stations are called by signaling each one with a different code.

Primarily recommended for connecting two points separated by a mile or less. Only two wires are required for connecting the two stations, either of which can ring and converse with the other.

# Inter-phone Systems for Apartment Houses

System No. 7.	7 up to 25 stations	<b>3</b> 9
System No. 8.	8 up to 26 stations	39
System No. 9.	9 up to 27 stations	39
System No. 10	0 up to 70 stations	30

These systems provide service for any combination of suite, vestibule, janitor's and tradesmen's Interphones. They differ from each other in their capacities and combinations.

From the vestibule, janitor and tradesmen stations it is possible to select, ring and talk individually to any of the other stations in the system (except between vestibule and tradesmen and vice versa).

This system provides service for an v combination of a number of suite Inter-phones, a vestibule Inter-phone, a janitor Inter-phone and a laur dry Inter-phone. From the vestibule, janitor, and laundry stations any one of the suite stations can be select. A and rung individually, and vice versa. One conversation can be carried on at a time in the system.

#### **INTER-PHONE SYSTEMS**

#### Inter-phone Annunciator System

Consists of one centrally located annunciator with Inter-phone, called the "Master Station," connected to which are a number of other Inter-phones called "Outlying Stations."

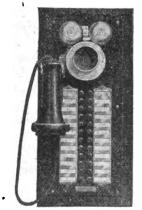
From the master station any one of the outlying stations can be rung selectively or the master station from any one of the outlying stations. Communication can be established between any two outlying stations through the medium of one or two connecting cords which can be used with the switchboard annunciator. Where many interconnections are required a private exchange switchboard of the No. 1801 type should be installed.

#### Inter-phone Outfits

Complete Inter-phone systems of small capacities (2 or more) put up in standard packages containing Inter-phones, all necessary installing material, and complete instructions for mounting and wiring. Page 43

#### Mechanical Code Signaling Systems

A call bell system making use of a number of mechanically revolving keys which, when turned, ring a number of bells simultaneously in accordance with a prearranged code. This calls to the telephone or central point persons to whom the code has been assigned. Fully described hereinafter.



No. 1355 Type Wall Inter-phone

## Inter-phone System No. 1

The No. 1 Inter-phone System is recommended for use in business organizations, factories, stores, institutions, large residences, etc., where frequently more than one conversation will take place at the same time; where prompt connections without loss of time are necessary and the highest grade of transmission is required.

Operation. From any station one can select and ring any other station without disturbing the rest of the stations in the system. That is only the station wanted will be signaled and no other. This is done by means of push button keys which are mounted in the face plates of the wall Interphones or in the key boxes used with desk stands or hand sets. For each station in the system, one push button key is required in each Inter-phone. Associated with the buttons are card holder frames to hold the cards which designate the names or station numbers of the buttons.



To make a call the button marked with the name or number of the station wanted is pressed (thereby ringing the bell of that station.)

Neither switchboard nor operator is required. The user makes his own connections, and is certain to get them right and without delay.

As many separate conversations can be carried on simultaneously as there are pairs of Inter-phones in the system. For example, in a system consisting of six Inter-phones, three separate conversations, as shown above, can be carried on at the same time without interfering with each other.

The class of service as described above is known as "Selective Ringing and Selective Talking" or "Non-interfering Service."

NO. 1324

WALL TYPE

NO. 1349

WALL TYPE

#### Western Electric

#### INTER-PHONES

# Syitem No. 1 (Continued)

Capacity. Inter-phones for System No. 1 are available in standard capacities of 6, 12, 16, 20 or 24 buttons. There can be as many Inter-phones stations in a system as there are buttons in the Interphones.

Types of Instruments. Wall, desk and hand set Inter-phones can be used interchangeably in the same system.

1324	Non-flush	6 and 12	Metal
1325	Semi-flush	6 and 12	Metal
1349	Non-flush	6, 12, 16, 20, 24	Wood
1355	Flush	16, 20, 24	Metal
6016*	Non-flush	6, 12, 16, 20, 24	Metal

\*Either desk or hand set type.

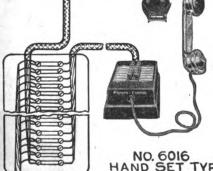
Write our nearest distributing house for particulars and prices.







NO.1324 WALL TYPE



No. 6016

CABLE

TERMINAL

CABLE TERMINAL

LAYOUT OF TYPICAL IZ STATION INTER-PHONE INSTALLATION (6 STATIONS SHOWN)



#### System No. 11

The No. 11 Inter-phone system is recommended for use in residences, banks, institutions, warehouses, stores, or other mercantile establishments where conversations can be limited to one at a time.

The system is reliable in operation and the apparatus is pleasing in appearance and moderate in cost.

Operation. Each Inter-phone in the system is equipped with a number of push buttons for signaling the other stations. Associated with the buttons are card holder frames to hold cards designating the name or station number of the buttons. By depressing the button marked with the name or number of the station wanted, the bell of that station will be rung. No other station in the system will be signaled but the one desired.

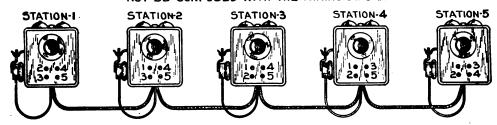
Summarizing the service:

From any one station in the system any other station in the system can be selected and rung without disturbing those stations that are not wanted, and

Only one conversation can be carried on at a time.

Each No. 11 system requires one battery station, which should be located near the battery. The other stations in the system should be of the non-battery station type. For example, in a system consisting of five stations, there should be one battery station and four non-battery stations.

THIS DIAGRAM IS INTENDED TO SHOW THE RINGING SERVICE PROVIDED BY 5-FOUR BUTTON SETS OF SYSTEM NO. 11 AND SHOULD NOT BE CONFUSED WITH THE WIRING DIAGRAM



EACH SET REQUIRES ONE BUTTON FOR EACH OTHER STATION IN THE SYSTEM, THUS-4 BUTTON SETS WILL PROVIDE FOR A 5 STATION SYSTEM, STATION \*1 CAN RING STATIONS 2,3,4 & 5; STATION \*2 CAN RING STATIONS 1,3,4 AND 5 - ETC. - SEE MARKING ON PUSH BUTTONS IN DIAGRAM ABOVE.

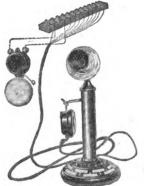
The class of service described under this system is known as Selective Ringing and Common Talking.

Capacity. The standard Inter-phones are equipped with 4, 8 and 12 buttons, accommodating the following number of stations in a system:

Types of Instruments. Wall, desk and hand set Inter-phones can be used interchangeably in the same system.



No. 1327 Type Wall Inter-phone



No. 6034 Type Desk Interphone



No. 6016 Type Desk Inter-



No. 1339 Type Wall Inter-phone



No. 6034 Type Hand Set Inter-phone

#### INTER-PHONES System No. 11 (Cont'd.)

	No. of	Illustrated		
Type	Buttons	on	Page	
1327	4 and 8		32	
1339	4 and 8	Metal	32	
1324	12 •	Metal	31	
1325	12	Metal	31	
6034*	4 and 8	Metal	32	
		an	d 33	
6016*	12	Metal	41	
and 33				
*Either desk or hand set				

Write our nearest dis-

tributing house for particulars and prices.



No. 6016 Type Hand Set Inter-phone

#### System No. 12

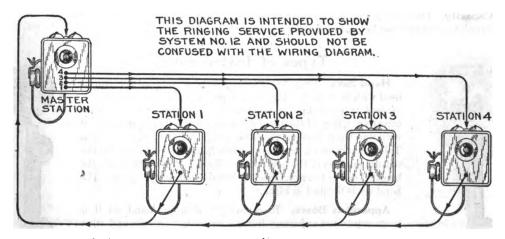
The No. 12 Inter-phone system consists of one centrally located Inter-phone called the "Master Station," to which a number of other Inter-phones, known as "Outlying Stations," are connected. This system is adopted for the same class of service as outlined under the No. 16 system, and provides communication from a central point to different rooms, and vice versa. It differs from the No. 16 system in that wall, desk or hand set Inter-phones can be used interchangeably in the same system, whereas the No. 16 system makes use of hand sets only.

Operation. The master station is equipped with a number of push buttons, one for each outlying station in the system. Associated with the buttons are card holder frames to hold cards designating the name or station number of the buttons. By depressing the button marked with the name or number of the outlying station wanted, the bell of that station will be rung. No other Inter-phone in the system will be signaled but the one desired.

The outlying stations are equipped with only one button, which will signal the master station when

The service provided by Inter-phone System No. 12 is called two-way service, which signifies that it is possible to select and ring individually any one of the outlying stations from the master station, and vice versa, any one of the outlying stations can call the master station. No provision is made for having the outlying stations call one another. If this feature is desired, systems No. 1, 11 or 15 should be used.

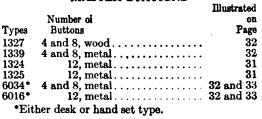
Only one conversation can be carried on at a time.



I MASTER STATION AND 4 OUTLYING STATIONS

Capacity. One master station and from two to twelve outlying stations can be connected? Types of Instruments. Wall, desk and hand set type Inter-phones can be used interchangeably in the same system.

# INTER-PHONES System No. 12 (Continued) MASTER STATIONS





1327	1, wood	34
1339	1, metal	34
6015	1, wood	38
6034	1, metal	38
6042	1, metal	34
6043	1, metal	34
	,	

Write our nearest distributing house for particulars and prices.



# System No. 16 GENERAL

The No. 16 Inter-phone system consists of one centrally located Inter-phone called the "Master Station" connected to a number of other Inter-phones called "Outlying Stations." This system is particularly adapted to residences, country places, hotels, hospitals, schools, etc., where it is desired to communicate from a central point to various rooms, and vice versa; for example:

In residences for calling a central point, such as the kitchen or pantry, from the living-room, bedroom garage, laundry, vestibule, attic, etc.;

In apartment houses for dumb-waiter service, where telephonic communication is desired between the tradesmen at the foot of the dumb-waiter shaft and the apartments;

In stores, offices, banks, where a number of people must frequently consult with the department heads, and vice versa;

In schools where the principal desires to call the teachers individually and the teachers to call him, but not to call each other;

In hospitals where the house doctor or head nurse may be wanted in a hurry;

In prisons or asylums where the superintendent, warden or other officials are likely to be summoned suddenly.

Capacity. One master station and any number of outlying stations, up to 24, can be installed. Additional outlying stations can be provided if desired.



No. 1339 Type Wall Inter-phone Outlying Station

No. 6842 Type Master or Outlying Station

## Types of Instruments

Hand Sets. Only the hand set type of Inter-phone can be used with System No. 16. This represents one of the most convenient types of talking equipment. The transmitter and receiver are a part of the hand set, which can be held and operated with one hand, leaving the other free. A bar marked Press to Talk is mounted on the hand set handle and is held down by the natural position of the hand while talking. When not in use, the hand set can be hung on a hook or laid down in any position. The hand set is finished in black.

Apparatus Boxes. In connection with the hand set it is necessary to use apparatus boxes containing terminals and other accessories. Two types of apparatus boxes can be furnished.

- 1. Round boxes arranged for non-flush mounting and equipped with an insulated base, black finished metal cover and nickel hook.
- Metal boxes arranged for flush mounting, intended to be set in wall and equipped with a brush brass finished face plate.



#### System No. 16 (Continued)

#### **FLEXIBILITY**



With the non-flush apparatus box, the hand set cord is permanently attached to the hand set and box. With the flush mounted apparatus box the hand set cord is not permanently attached to the box, but terminates in a plug (except with No. 6042L and G, System No. 16B). This plug can be inserted into a receptacle located in the center of the face plate just below the push button, thereby connecting the hand set to the system. This feature makes it possible to discontinue telephone service at any point by simply removing the plug and the hand set. A hand set can be carried around from room to room to serve as an outlying station at any place where a flush apparatus box is located. The plug is equipped with a hook on which the hand set can be hung when not in use.

Three kinds of ringing service are possible with System No. 16. They are designated as Nos. 16A, 16B and 16C. Any one can be obtained by specifying appropriate equipment.

No. 16A: One-way Service, Master Station Can Call Outlying Stations. Any one of the outlying stations can be called from the master station. No other Inter-phone in the system will be signaled but the one desired. The outlying stations cannot ring the master station.

No. 16B: One-way Service, Outlying Stations Can Call Master Station. Any one of the outlying stations can ring the master station, but the master station cannot ring the outlying stations.

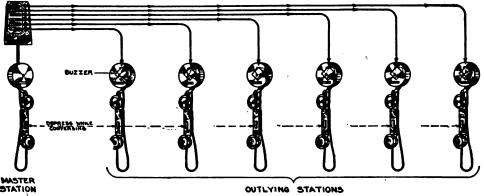
No. 16C: Two-way Service. This is a combination of No. 16A and 16B in which any one of the outlying stations can ring the master station and the master station can ring any one of the outlying stations. No other Inter-phone in the system will be signaled but the one desired.

Only One Conversation Can Be Carried on at a Time, no matter what class of ringing service is to be used. No provision is made for having the outlying stations call one another. If this feature is desired Systems Nos. 1, 11 or 15 should be used.

# System No. 16A PROVIDING ONE-WAY SERVICE Master Station Can Call Outlying Stations

The master station may consist of a hand set with either a flush or a non-flush mounted apparatus box, and a push button block, with as many push buttons as there are outlying stations to be called. Associated with the buttons are card holder frames for holding cards to designate the name or station number of each button. The blocks come in capacities of 4, 6, 8, 10, 12, 14, 16 and 20 buttons.

THIS DIAGRAM IS INTENDED TO SHOW THE RINGING SERVICE PROVIDED BY SYSTEM NOIGH AND SHOULD NOT BE CONFUSED WITH THE WIRING DIAGRAM



To call an outlying station from the master station, the button marked with the name or number of the station wanted must be depressed. This will operate the buzzer at the outlying station. No other Interphone in the system will be signaled but the one desired. Conversation can be carried on by depressing the talking bar in the hand set handle. In this system the outlying stations cannot call the master station nor can the outlying stations call one another.

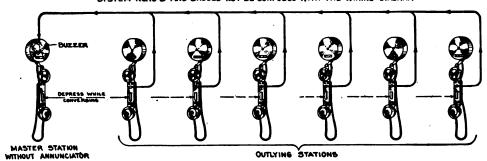
Write our nearest distributing house for particulars and prices.

#### System No. 16B

#### PROVIDING ONE-WAY SERVICE

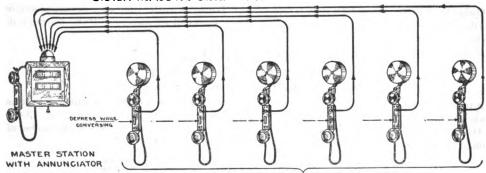
Outlying Stations Can Call Master Station

THIS DIAGRAM IS INTENDED TO SHOW THE RINGING SERVICE PROVIDED BY SYSTEM NO. 16-B AND SHOULD NOT BE CONFUSED WITH THE WIRING DIAGRAM



The master station may consist of a hand set with either a flush or non-flush mounted apparatus box, or a hand set and an annunciator. The outlying stations may consist of a hand set with either a flush or a non-flush mounted apparatus box.

THIS DIAGRAM IS INTENDED TO SHOW THE RINGING SERVICE PROVIDED BY SYSTEM NO. 16-B AND SHOULD NOT BE CONFUSED WITH THE WIRING DIAGRAM



OUTLYING STATIONS

Each outlying station is provided with a push button, which when depressed will signal the master station. If the master station consists of a hand set and apparatus box, there will be nothing to indicate which outlying station originated the call. If such an indicating arrangement is desired, an annunciator, equipped with as many drops as there are outlying stations, is required in place of the apparatus box. Each call from the outlying stations will then be registered by the operation of one of the drops, thereby indicating what outlying station signaled. Conversation can be carried on by depressing the talking bar in the hand set handle.

The master station cannot call the outlying stations, nor can the outlying stations signal each other. Write our nearest distributing house for particulars and prices.

# System No. 16C

#### PROVIDING TWO-WAY SERVICE

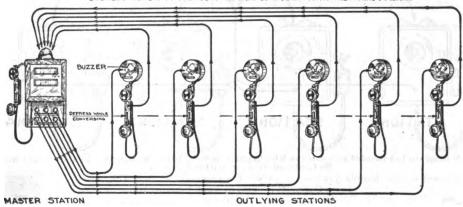
#### Master Station Can Call Outlying Stations and Vice Versa

In the No. 16C system the master station consists of a hand set and an annunciator equipped with a bell, a number of drops and a corresponding number of push buttons, one for each outlying station. Associated with these buttons are card holder frames for holding cards to designate the name or station number of each button. The outlying stations may consist of a hand set and apparatus box arranged for either flush or non-flush mounting.

Each outlying station is provided with a push button to ring the bell of the master station annunciator, and at the same time operate one of the annunciator drops.

#### SYSTEM NO. 16C (Continued)

THIS DIAGRAM IS INTENDED TO SHOW THE RINGING SERVICE PROVIDED BY SYSTEM NO. 16-C AND SHOULD NOT BE CONFUSED WITH THE WIRING DIAGRAM



To signal an outlying station from the master station, the annunciator push button corresponding to the station wanted must be depressed, thereby operating the buzzer at the outlying station. No other Interphone will be signaled but the one desired.

Conversation can be carried on by depressing the talking bar in the hand set handle.

#### **EXTENSION CORDS**

The standard hand set cord is three feet long. Longer cords are often needed, as in case of illness or for other reasons, so that the hand sets can be used in bed or any other point some distance from the apparatus box. In such cases hand sets for outlying stations can be furnished provided for or equipped with an extension cord in addition to the standard three-foot hand set cord. Each extension cord is eight feet long and as many extension cords can be connected as desired.

Write our nearest distributing house for particulars and prices.

# System No. 15

The No. 15 Inter-phone system is a simple and inexpensive system for smaller residences, warehouses, stores or other mercantile establishments, where only a few stations are required and the number of calls between the stations are few.

Operation. Each station is equipped with one push button for signaling the other Inter-phones in the system. Whenever the push button at any one station is depressed the bells at all the other stations will ring simultaneously.

When there are more than two stations in the system, it becomes necessary to provide some means whereby it is possible to indicate to the various stations which one of them is wanted to respond to the ring of the bell. This can be arranged by a code of signals made up of various numbers of rings; for instance:

One ring for station No. 1, two rings for station No. 2, three rings for station No. 3, etc. Thus a certain number of rings originated at any one of the stations will indicate the station desired, and none of the others, to whom the signal will also be audible, will respond.

If more than six stations are in service, the signaling code becomes cumbersome and mistakes are likely to occur, due to the possibility of misunderstood signals.

Only one conversation can be carried on at a time.

This system requires one battery station, which should be located near the battery. The other Interphones in the system should be of the non-battery station type. In a system consisting of five stations, for example, there should be one battery station and four non-battery stations.

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No. 6034 Type Desk Inter-phone

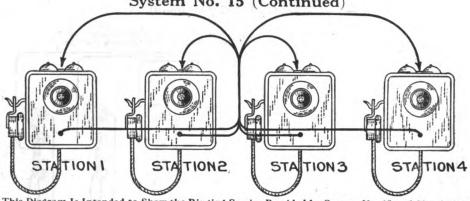
No. 6042 Type Hand

Set Inter-phone

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#### **INTER-PHONES**

System No. 15 (Continued)



This Diagram Is Intended to Show the Ringing Service Provided by System No. 15 and Should Not Be Confused with the Wiring Diagram

The class of service described is known as Code Ringing and Common Talking. Capacity. Two to six stations are recommended

for this system. More stations can be added, though at the expense of ease and certainty in signaling.

Types of Instruments. Wall, desk and hand set Inter-phones can be used interchangeably in the same system. Illustrated Types Used on Page 1327 Wood..... 38 1339 Metal . . . . 34 6034 Metal.. 38 6042

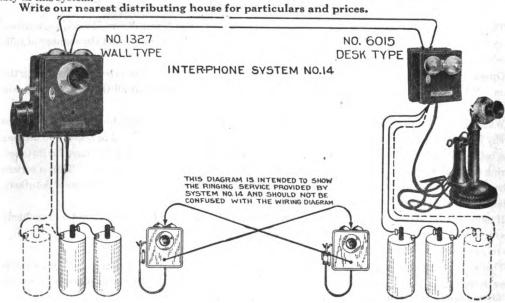
Metal..... 38 6043 Metal..... System No. 14

The No. 14 Inter-phone System is intended for use where only two stations will be required, and located a considerable distance apart. A feature of this system is that only two wires are required to connect the Inter-phones.

Operation. Either station can ring and talk to the other.

This is done by depressing the push button with which each set is equipped, thereby ringing the bell at the other station, holding the receiver to the ear and talking into the transmitter.

Types of Instruments. No. 1327 wall and No. 6015 desk type Inter-phones can be used interchangeably in this system.



#### Systems for Apartment Houses

Apartment House Inter-phones are for use in place of the old-time speaking tube for effecting communication between the vestibule, apartments, janitor and tradesmen.

Apartment House Inter-phone Systems may be divided primarily into two classes, in accordance with the service they will furnish:

- 1. Systems Nos. 7, 8, 9 and 10 will furnish selective ringing and selective talking or non-interfering service, making it possible for a number of conversations to take place simultaneously.
- 2. System No. 20 will furnish selective ringing and common talking service, making possible only one conversation at one time.

#### **SYSTEMS NOS. 7, 8, 9 AND 10**

These systems are planned throughout with the utmost care to insure satisfaction under all service conditions. The telephone instruments themselves are neat and attractive in design. Systems Nos. 7, 8, 9 and 10 differ from one another in the variety of points in the apartment house that can be connected for intercommunicating service. They are, however, so arranged that one system may be expanded into another by merely supplying additional apparatus.

Operation. The systems may consist of one, two, three or more central or master Inter-phones located in the vestibule, janitor's or tradesmen's entrance. These sets may be connected to (from 3 to 24) Interphones located in the apartments.

The vestibule, janitor's and tradesmen's Inter-phones are equipped with a number of push button keys one for each apartment station. Associated with these push button keys are card holder frames to hold cards designating the name or apartment number of the buttons. By simply depressing the button marked with the name or the number of the apartment desired, the bell of the Inter-phone installed in that apartment will be rung. No other station in the system will be signaled but the one desired.

The suite Inter-phones can be provided with one or two buttons which, when depressed, will ring the janitor's station or operate an electric door opener.

Separate conversations may take place simultaneously between each of the vestibule, janitor's and tradesmen's sets, and three different apartments. This is manifestly impossible with a single speaking tube system.



No. 1362 Vestibule Inter-phone with Letter Boxes

Types of Instruments. Wall or hand set type Inter-phones may be used interchangeably in the same system for suite service. The vestibule, janitor's and tradesmen's Inter-phones are of the wall type only. The vestibule letter boxes are equipped with either two or four separate compartments.



No. 1327 Type Suite Inter-phone

#### SYSTEM NO. 7

Service. Vestibule can call apartments. Apartments can open door, if desired.

Capacity. One vestibule Inter-phone and any number of suite Inter-phones up to 24.

#### SYSTEM NO. 8

Service. Vestibule can call apartments and janitor.

Apartments can call janitor and open door, if desired.

Janitor can call apartments.

Capacity. One vestibule Inter-phone, one janitor's Inter-phone and any number of suite Inter-phones up to 24.



No. 1339 Type Suite Inter-phone

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## Systems for Apartment Houses (Continued)

#### SYSTEM NO. 9

Service. Vestibule can call apartments and janitor.

Apartments can call janitor and open door, if desired.

Janitor and tradesmen can call apartments.

Capacity. One vestibule Inter-phone, one janitor's Interphone, one tradesmen's Interphone and any number of suite Inter-phones up to 24.

#### SYSTEM NO. 10

Service. This system provides the same service as outlined under System No. 9, but on a larger scale. It is intended for use where several vestibules, in the same or adjoining apartment houses are to be served by one janitor. In this case, the janitor's equipment consists of a switchboard which combines the functions of a wall type Interphone and annunciator.



No. 1350 Type Janitor's and Tradesmen's Inter-phone

Janitor's Annunciator Switchboard for System No. 10

Capacity. One janitor's switchboard, two or more vestibule and tradesmen's Inter-phones and any number of suite Inter-phones up to 70.

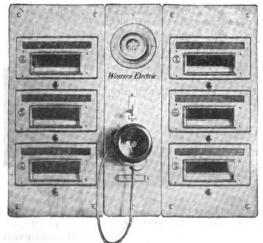
_		Number of	Illustrated	
Type		Buttons	on Page	
Vestibule Inter-phones	1362	*7, 13, 17, 21, 25, metal		
Suite Inter-phones	1327	1, 2, wood		
	1339	1, 2, metal		
	6042	1, 2, metal		
	6043			
Janitor's and trades-	1350			

\*The odd button is for calling the janitor.

+The odd button is for conversing with vestibule. Disregard button in tradesmen's Inter-phones.

#### SYSTEM NO. 20

The No. 20 Inter-phone System has been designed to provide an inexpensive and reliable means of communication between vestibule, apartments, janitor's quarters, laundry and tradesmen's entrance. There are eight different combinations of the No. 20 System, differing from each other in the variety of points in the apartment house that can be connected for intercommunicating service. The operation of each of these combinations, however, is the same.



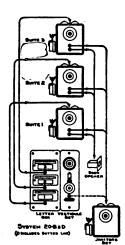
Vestibule Equipment for Six Apartments

**Operation.** The vestibule equipment consists of one vestibule Inter-phone and any number of letter boxes.

The vestibule Inter-phone is provided with necessary talking equipment and one push button, the latter to be used for calling the janitor. Each letter box is provided with three compartments. A push button is mounted below each compartment. When depressed this button will ring the bell of the Inter-phone in the apartment to which the letter box compartment has been assigned. No other Inter-phone in the system will be signaled but the one selected. Each letter box compartment is also equipped with a card holder for indicating the name or apartment number.

The suite sets can be provided with a number of push buttons, depending upon the combination selected. These push buttons when depressed will operate the door opener, call the janitor, laundry or any other combination desired.

Write our nearest distributing house for particulars and prices, and by the state of the state o



# BUTTE I STEP SECTION OF STEP S



#### No. 1520 Type

#### **INTER-PHONES**

# Systems for Apartment Houses (Continued)

#### SYSTEM NO. 20 (CONTINUED)

The janitor's, laundry and tradesmen's Inter-phones can be arranged either for receiving calls from the other stations without being able to signal back, or for receiving calls and for signaling any one of the suite sets. In the latter case a separate push button block must be used, which can be mounted conveniently beside the instrument.

Only one conversation can be carried on at a time over this system.

The class of service as described under this system is known as "Selective Ringing and Common Talking."

There are eight combinations of the No. 20 System available. The diagrams associated with this description are intended to show the ringing service provided and should not be confused with the wiring diagram.

#### SYSTEM NO. 20A

Service. Vestibule can call apartments, apartments can open door.

#### SYSTEM NO. 20V

Service. Vestibule can call apartments, apartments can open door and call janitor.

#### SYSTEM NO. 20C

Service. Vestibule can call apartments and janitor, apartments can open door.

#### SYSTEM NO. 20D

Service. Vestibule can call apartments and janiter, apartments can open door and call janitor.

#### SYSTEM NO. 20E

Service. Vestibule can call apartments and janitor, apartments can open door and call janitor and laundry.

#### SYSTEM NO. 20F

Service. Vestibule can call apartments, apartments can open door and call janitor or laundry, and laundry or janitor can call apartments.

#### SYSTEM NO. 20G

Service. Vestibule can call apartments and janitor, apartments can open door and call janitor, and janitor can call apartments.

#### SYSTEM NO. 20H

Service. Vestibule can call apartments and janitor, apartments can open door and call janitor and laundry. Janitor and laundry can call apartments.

•	Гуреѕ	Number of Buttons	Illustrated on Page
Vestibule Inter-phones	1520	1 metal	50
Suite Inter-phones	1327	1, 2, 4 wood	34 and 32
•	1339	1, 2, 4 metal	34 and $38$
Janitor's, laundry and			
tradosmon's Inter-phones	1327	wood	21

Capacity. One vestibule set and any number of letter boxes can be used. One letter box will take care of 3 suite inter-phones.

Write our nearest distributing house for particulars and

#### Annunciator System No. 18

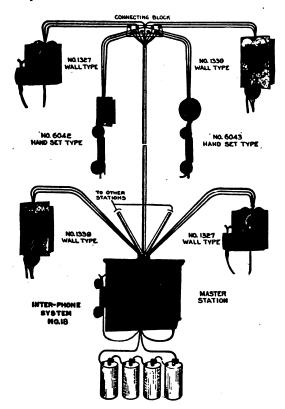
The No. 18 Inter-phone Annunciator System is designed to provide the service required in hotels, clubs Y. M. C. A. buildings, schools, hospitals, asylums, prisons, and in fact wherever it is found desirable to establish communication between a central point and a large number of points in one or several buildings. No connection can be made between this system and a public telephone system.

The system consists of one centrally located Inter-phone equipment called the "Master Station" to which are connected a number of other Inter-phones called "Outlying Stations."

Operation. The master station equipment is a combination of an annunciator and a hand set type Inter-phone. The annunciator consists of a number of drops and jacks (one of each for every outlying station in the system), a cord and plug and a hand set Inter-phone. The associated drops and jacks are provided with corresponding numbers. From the master station it is possible to select and ring any one of the outlying stations in order to carry on conversation. This is done by inserting the plug into the jack bearing the number of the outlying station wanted and depressing a push button mounted on the front of the annunciator.

Each outlying station is provided with one push button which, when depressed, will ring the bell of the master station, and at the same time operate an annunciator drop bearing a number corresponding to that of the station calling. In response to this signal, the plug of the annunciator cord at the master station should be inserted in the jack corresponding to the operated drop. This connects the calling outlying station to the master station Inter-phone.

Capacity. This system provides for one master station and 10 to 70 or more outlying stations.



Types of Instruments

Wall or hand set type Inter-phones can be used interchangeably in the same system. The master station equipment consists of an annunciator and a hand set type Inter-phone. The outlying stations of either 1327 wooden or 1339 metal wall Inter-phones or 6042 or 6043 metal hand Inter-phones.

Write our nearest distributing house for particulars and prices.

#### INTER-PHONES Outfit No. 14

This consists of two wall type Inter-phones suitable for a private telephone line between house and



barn or garage, or for a line that is wholly within a house. It may also be used in offices or shops between two buildings or in one building.

Either station can ring and talk to the other.

The Inter-phones are the same as those used for Inter-phone System No. 15. The instruments are of wood, arranged for non-flush mounting and fin-ished in golden oak. Concise and fully illustrated instructions for installing are included in every package.

	Outilit 140. 14-D Package:		
Outfit N		Retail	List Price
14	Includes two wall type Inter-phones in one box but no installing or wiring material.	Price \$15.60	Each \$31.20
14A	For use where the wiring is to be run entirely under cover and not exposed to moisture or weather. Includes one No. 14 outfit in one box, and another box containing 75 feet of insulated 3 conductor copper wire, two battery connectors, insulated nails for fastening wires, and illustrated installing		
14B	instructions.  For use where the wiring is to be run in the open between or outside of buildings, and exposed to weather and moisture. Includes one No. 14 outfit in one box, and another box containing 150 feet of outside 3 conductor copper wire, two brackets with screws, hooks and knobs to attach wires to building, two porcelain tubes to insulate wires when entering building, two battery connectors, 25 insulated nails for fastening wires inside build-	17.85	35.70
	ing, and illustrated installing instructions.	<b>22</b> .25	44.50

#### Outfit No. 15



suitable for the same class of service for which the No. 14 type outfit is intended. The Inter-phones are identical with the non-flush type hand sets used in Inter-phone System No. 15.

This consists of two hand set type Inter-phones

Either station can ring and talk to the other.

The instruments are finished in black with transmitter and receiver on one handle, and equipped with a small non-flush apparatus box. Complete instructions for installing are included in each package.

Outfit N	o. Description	Retail	List Price
15	Includes two hand set type Inter-phones in one box but no installing or wiring material	Price \$19.40	Each \$38.80
15A	For use where the wiring is to be run entirely under cover and not exposed to moisture or weather. Includes one No. 15 outfit in one box, and another box containing 75 feet of insulated 3 conductor copper wire, two battery connectors, insulated nails for fastening wires, and illustrated installing	<b>21</b> 22	40.00
15B	instructions.  For use where the wiring is to be run in the open between or outside of buildings, and thus exposed to weather and moisture. Includes one No. 15 outfit in one box, and another box containing 150 feet outside 3 conductor copper wire, two brackets with screws, hooks and knobs to attach wires to buildings, two porcelain tubes to insulate wires when entering building, two battery connectors, 25 insulated nails for fastening wires inside build-	21.60	43.20
	ing, and illustrated installing instructions	<b>26</b> .10	<b>52.2</b> 0



Two hand set type Inter-phones are furnished with this outfit, which is intended to be used for converting any existing bell, buzzer or annunciator circuit into a practical working telephone system. This can be done by using the existing wires, bell and batteries, replacing the push button with one hand set and connecting the other hand set to the wire near the bell. As only one bell is used, calls can be made in one direction only. An outfit of this type placed in the office makes it unnecessary for the clark or office boy to run back and forth when file information is required by the executive. List Price

Description Outfit No. For use with any existing circuit consisting of one bell or buzzer and one push 16A button. Includes two hand set type Inter-phones, two connecting blocks with mounting screws, 25 feet of insulated twisted pair copper wire (to connect the Inter-phones to the existing wiring), 20 insulated nails for fastening wires, two hooks for holding hand sets and illustrated installing

Price Each

Retail

\$13.20 \$26.40

#### **INTER-PHONES**

#### Outfit No. 16 (Continued)

If the existing bell, buzzer or annunciator circuit consists of two or more push buttons, a No. 16A outfit should be used—one hand set for the bell, buzzer or annunciator station, the other to replace one of the push buttons—and one No. 16B Inter-phone outfit for each additional push button.

Outfit No.	Description	Retail Price Each	List Price Each
16 <b>B</b>	To be used in addition to No. 16A outfit if existing bell, buzzer or annunciator	•	
	circuit has two or more push buttons. Includes one hand set type Inter-	•	
	phone, one connecting block with mounting screws, 12 feet of insulated	l	
	twisted pair copper wire, 10 insulated nails for fastening wires, one hook for	•	,
	holding hand set, and illustrated installing instructions	\$7.20	\$14.40



No. 17 Outfit

#### Outfit No. 17

This consists of two Hand Set Type Inter-phones with all the material required to install a simple intercommunicating system between two points not over 80 feet apart, and where the wire will be wholly indoors and not exposed to weather conditions or moisture.

When installed in accordance with the directions furnished with each outfit, either station can call or talk to the other. Although intended primarily for business use, the No. 17 outfit can be used equally well in the home.

Outfit No.	Description	Retail Price Each	List Price Eacb			
17	Includes two hand set type Inter-phones, two connecting blocks with mounting					
	screws, 80 feet of insulated twisted pair copper wire, 60 insulated nails for	oogle				
	screws, 80 feet of insulated twisted pair copper wire, 60 insulated nails for fastening wire, two hooks for holding hand sets, two bells, two battery con-	ioogic				
	- I Mentanted installing instructions	\$15.50	\$31 NO			

\$0.15

# INTER-PHONE ACCESSORIES

1A

2B

1396

Extension Bell



Code List Price Description Each No. 11B This bell is wound to 10 ohms, and may be used as an extension bell for any Inter-phone system. It should also be used for any separate signaling circuit, such as a door bell operating from the Inter-phone batteries... \$1.80

No. 11B Extension Bell

## **Battery Boxes**



Black japanned sheet metal box lined with an insulating material. Holds 3 Blue Bell dry cells. Size of box,  $8\frac{7}{4}$  inches long by  $3\frac{7}{32}$  inches wide by  $7\frac{7}{8}$  inches high. \$2.40 Similar to the No. 1A. Holds 9 Blue Bell dry cells. Size of box,  $14\frac{5}{32}$  inches long by  $5\frac{23}{32}$  inches wide by  $7\frac{5}{8}$ 8.50 inches high.....

No. 1A-Battery Box

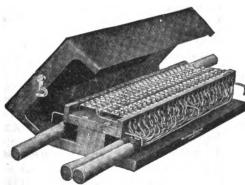
# Push Button Wood push button.....



No. 19 Type Cable Terminals

No. 1396 Push Button

The No. 19 Type cable terminal is admirably suited for interior distributing work. It was designed after a great deal of study, and is thought to be the best of its kind on the market. Made of hard wood, numbered and shellacked, and equipped with a japanned sheet metal cover.



Capacity List Code Dimensions, Inches Price No. Pairs Width Length Depth Each 19A **\$**8.**60** 14 19B 26 11.00

No. 19B. Cable Terminal

#### Connecting Blocks

# No. 6 TYPE

These consist of brass studs embedded in a hard composition base. Studs fitted with two nuts (one a split check nut) and two washers.

Code No.	Capacity in Pairs	Length	Width	List Price Each
6A	7	$5\frac{5}{8}$ ins.	1 1/8 ins.	\$1.50
6B	11	$8\frac{5}{8}$ ins.	$1\frac{7}{8}$ ins.	2.30
6C	16	$12\frac{3}{8}$ ins.	$1\frac{7}{8}$ ins.	2.90
6D	21	$16\frac{1}{8}$ ins.	$1\frac{7}{8}$ ins.	4.00
6E	26	$19\frac{7}{8}$ ins.	$1\frac{7}{8}$ ins.	4.80

#### Nc. 6B Connecting Block



No. 11A Connecting Block

#### Nos. 11 AND 12 TYPES

These consist of a composition base in which the screw terminals are imbedded. Each terminal consists of two screw bushings electrically connected by means of a metal strip, and provided with screws and washers.

Code	No. of	Size	List Price
No.	Terminals	Inches	Each
11A	<b>2</b>	$1\frac{1}{8} \times 1\frac{5}{12}$	\$0.50
11B Sar	ne as No. 11A exc	ept equipped with	hacover60
12A	3	1 1 x 1 5	.60
12B Sar	ne as No. 12A exc	ent equipped wit	hacover70

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#### INTER-PHONE ACCESSORIES

#### Inter-phone Cable





Cable for Interior Cable for Outside Use

The conductors are provided with double silk and single cotton insulation, which is colored in such a way that each pair and each single wire can be identified. The cable is then impregnated with a wax compound and is covered with servings of paper and a heavy braiding, which is given a heavy coat of fireproofing paint.

The impregnation with wax prevents the insulation from fraying when the cables are installed. It also serves to protect the formed ends against moisture.

Three general types of cable are provided. Each type has its particular use, and care should be taken to order the proper cable for any desired purpose. These types are as follows:

- 1. Interior cable with outside braiding treated with gray fireproofing paint. Use only in dry places.
- 2. Interior cable with green glazed cotton outside braiding. only in dry places where exposed to view.
- 3. Outside cable, lead covered. Always use this cable outside, and inside in every case where there is apt to be moisture even in a small degree

Lead-covered cables are not listed with separate Code Nos. Any fireproofed type of cable may be ordered with a lead sheath.

All cables are provided with a standard color scheme, so that each pair can be distinguished from any other. The pairs are properly twisted to prevent inductive disturbances.

Code No.	Conductors B. & S. Gauge	Covering	Approx. Outside Diameter	List Price per 100 Feet
185	4 singles No. 22	Fireproofed braid	$\frac{1}{4}$ in.	
161 .	8 singles No. 22	Fireproofed braid	5 in.	
161 (Lead)	8 singles No. 22	Lead sheath,	5 in.	
142	8 singles No. 22	Green cotton braid	5 in.	
162	12 singles No. 22	Fireproofed braid	<del>11</del> in.	
162 (Lead)	12 singles No. 22	Lead sheath	3⁄8 in.	
163	12 singles No. 22	Green cotton braid	<del>25</del> in.	
164	6 singles No. 22, 2 pair No. 16	Fireproofed braid	13 in.	
164 (Lead)	6 singles No. 22, 2 pair No. 16	Lead sheath	13 in.	
165	6 singles No. 22, 2 pair No. 16	Green cotton braid	3⁄8 in.	
134	6 pair No. 22, 2 pair No. 16	Fireproofed braid	<del>13</del> in.	On request
134 (Lead)	6 pair No. 22, 2 pair No. 16	Lead sheath	7 in.	
155	6 pair No. 22, 2 pair No. 16	Green cotton braid	13 in.	
141	12 pair No. 22, 2 pair No. 16	Fireproofed braid	7 in.	
141 (Lead)	12 pair No. 22, 2 pair No. 16	Lead sheath	½ in.	
156	12 pair No. 22, 2 pair No. 16	Green cotton braid	<del>7</del> in.	
157	16 pair No. 22, 2 pair No. 16	Fireproofed braid	<del>17</del> in.	
157 (Lead)	16 pair No. 22, 2 pair No. 16	Lead sheath	9 in.	
159	16 pair No. 22, 2 pair No. 16	Green cotton braid	17 in.	
158	20 pair No. 22, 2 pair No. 16	Fireproofed braid	9 in.	
158 (Lead)	20 pair No. 22, 2 pair No. 16	Lead sheath	<del>13</del> in.	
160	20 pair No. 22, 2 pair No. 16	Green cotton braid	9 in.	
136	24 pair No. 22, 2 pair No. 16	Fireproofed braid	19 in.	
136 (Lead)	24 pair No. 22, 2 pair No. 16	Lead sheath	5/8 in.	
150	24 pair No. 22, 2 pair No. 16	Green cotton braid	🥦 in.	
140	31 pair No. 22, 2 pair No. 16	Fireproofed braid	5% in.	1.
Cable	14	Digitized by	G008	IC

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#### MECHANICAL CODE SIGNALING SYSTEMS

#### General



APPLICATION. In every mercantile establishment it is often necessary to communicate immediately with the manager, superintendent or other executive who is not at his desk or within hearing range of his telephone bell at the moment.

In schools the principal, his assistant or the janitor are frequently wanted when they may be in any one of several places about the building.

The same is true of hotels and Y.M.C.A. buildings where the presence of the janitor, engineer or manager may be urgently needed at the office.

In hospitals the house doctor or head nurse may be wanted in a hurry when they are on their rounds.

In prisons or asylums the superintendent, warden, head keeper, or other official is apt to be suddenly wanted on an important matter.

No. 1A. Signaling Set

To call different telephones (if such equipment is part of the building) one at a time, or to send a messenger in order to locate the desired person, frequently takes a considerable period of time, but with a mechanical code signaling system installed, the operator, clerk or other employee in the office or other central point gives a turn to a revolving key marked with the name of the individual wanted, which instantly signals the person desired wherever he may be.

**DESCRIPTION.** The equipment consists of a centrally located wooden cabinet equipped with revolving contact keys. A number of bells are mounted in different parts of the building which, when actuated from the central key cabinet, will ring simultaneously.

OPERATION. The key cabinet is equipped with a number of revolving keys. When the handle of a key is turned one-half revolution it slowly moves back to its original position, making and breaking an electrical contact a number of times at different intervals, thus forming a combination which is repeated four times before the key comes to a final stop. Each key produces a combination different from any of the other keys.

By placing the bells in such locations that, no matter where a person may be, he will always be within hearing distance of one of them, and by installing at a central point a key cabinet equipped with as many keys as there are persons in the organization who are apt to be frequently wanted on important matters, a call can be sent out for any one of them just by turning the key assigned to him. All bells will immediately sound the proper combination, and on hearing his call the person wanted steps to the nearest telephone and is in communication with the office immediately.

In addition to the regular signals described above, a special signal giving a continuous series of impulses to attract attention above all other signals can be furnished if desired. This special signal is intended to be used for emergency, fire, etc.

**CAPACITY.** The system can be furnished with keys for sending out 4, 6, 8, 10, 12, 14 and 16 different signals, thus producing maximum calling facilities for sixteen persons, which is usually all that average conditions require. When the special signal mentioned above is furnished this reduces by one the capacity for regular signals.

BELLS. It has been found that single stroke bells with 6 inch gongs will give satisfactory service under ordinary conditions. Any number and various sizes of bells can be combined to form one system.

INSTALLATION. The signaling system can be used alone or in connection with an Inter-phone System.

- 1. Independently. The signaling system can be installed and operated entirely separate and apart from any other system, and requires only two wires for its operation. As many bells as desired can be connected and made to simultaneously sound any desired code by turning the proper key in the key cabinet.
- 2. With Intercommunicating Telephone Systems. These signal sets can be connected directly to our inter-phones of System No. 1 without any change in the wiring of the instruments, or special bells. In this case, the bells on the instruments sound the code signals simultaneously whenever any one of the calling keys in the key cabinet is set in motion.

In case, however, loud ringing bells are required, or bells in locations where telephones are not installed, it will be found more satisfactory to install this code signaling system independently of any other equipment.

3. With Private Exchange or Private Branch Exchange Telephone Systems. A mechanical signaling system, when installed in connection with telephone systems of this class, should be put in as a separate system without special regard for the location of the various telephone instruments, the object being rather to so locate the bells that they will be best heard from every nook and corner of the plant.

#### MECHANICAL CODE SIGNALING SYSTEMS

#### General—(Continued)

CONNECTION DIAGRAMS. No connection diagrams are given for the reason that there are many different signaling systems in which the code signaling sets can be used. We furnish, upon application, detail information covering the connection of these sets with inter-phones and with large and small bells and buzzers. If you will advise us as to your requirements, we will be very glad to work up a suitable signaling system and make you a quotation.

**REQUIREMENTS.** The following apparatus and accessories are usually required: The key cabinet (state capacity) with 4 (or less) up to 16 keys.

Any number and size of bells.

One resistance coil and condenser box (to prevent sparking at contacts).

One or more relay boxes, depending upon the number and size of bells and the length and size of

Necessary wire to connect the apparatus.

One or more batteries consisting of four or more cells, depending upon the number and size of bells and the length and size of wire.



No. 2A Code Signaling Set



Model "ASS" Single-stroke En-



No. 262F Coll and Condenser Box

#### Code Signaling Sets

The cabinets are made of golden oak, quarter-sawed. metal face is finished in dull black with nickel trimmings. sets are made only in 4 and 6 key sizes (each key providing a different signal), but they can be mounted side by side when 8, 10, 12, 14 or 16 signals are required.

Code		•	List Price
No.	Signal	s Description	Each
1 A	4	Used for 4 signals	\$153.00
1B	4	Used with 1A for 8 signals	153.00
1C	4	Used with 2A for 10 signals	153.00
1E	4	Used with 1A and 1B for 12 signals	153.00
1F	4	Used with 2A and 1C for 14 signals	153.00
1D	4	Used with 1A, 1B and 1E for 16 signals.	153.00
2A	6	Used for 6 signals	196. <b>50</b>
$^{2}\mathrm{B}$	6	Used with 1A for 10 signals	196.50
2C	6	Used with 2A for 12 signals	<b>19</b> 3. <b>50</b>
$2\mathrm{E}$	6	Used with 1A and 1B for 14 signals	196.50
$^{2}D$	6	Used with 2A and 1C for 16 signals	196.50
	Each of	the above key cabinets may be ordered	nartially

the above key cabinets may be ordered partially equipped.

If a special signal is desired one set should be ordered equipped with signal wheel No. 17.

# Bells and Horns

Bells of the enclosed type, either single stroke or vibrating, with 4, 6 or 8 inch gongs, can be furnished, the particular type and size depending on the local conditions.

#### HORNS

Factory signaling horns can be furnished when a signal of this type for extremely noisy places is necessary.

## Coil, Condenser and Relay Boxes

With each code signaling set a resistance coil and condenser box, No. 262F, is required to prevent excessive sparking at the contacts. This box is made of quarter-sawed oak to match the

A relay box is necessary under certain conditions, depending upon the number and size of bells and the length and size of wire. This box contains a resistance coil and a condenser in addition to the relay. It is similar in appearance to the No. 262F, and is known as the No. 262G Relay Box.

Code No.	Description	List Price Each
262F	Coil and condenser box. Used to prevent sparking at contacts	
262G	Relay box.	

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#### **MAGNETO TELEPHONES**

#### No. 1317 Type

General. The No. 1317 wall telephones listed below are equipped with our standard long distance transmitter, concealed binding post hand receiver, induction coil and cords.



No. 1317C Type (2 Cell) Magneto Telephone

All of these telephones are wired for a condenser to be inserted in the receiver circuit. If condensers are desired, however, it should be so stated in the order excepting in the case of the No. 1317R, S, CR and CS telephones, which are furnished equipped with a condenser as standard. This should not be confused with the telephones for harmonic ringing service, which are always furnished equipped with a condenser wired in the ringer circuit.

Bridging code ringing telephones can be arranged for "central office selective signaling," by ordering a No. 465D key for each telephone to be so equipped. These keys are intended for mounting on the side of the telephones and can be easily wired into the circuit to perform the same function as telephones equipped with No. 1006A push buttons.

# Two Blue Bell Batteries and One No. 60A Protector Are Furnished With Each Telephone and Are Included in the Price

NOTE: If batteries are not desired, deduct 60 cents from the list price. If protector is not desired, deduct 50 cents from the list price.

## No. 1317C (2 Cell) Type

The No. 1317C type magneto telephone is the result of a demand by many of our customers for a more compact type of telephone. It has been designed with a battery compartment only large enough to accommodate 2 cells, thus making possible a smaller and neater cabinet.

#### RINGERS OPERATED BY ALTERNATING CURRENT

#### Code Ringing

	Ringer					†List
Code	Resistance		Push	Con-		Price
No.	Ohms	Generator	Button	denser	Service	Each
1317CN	1600	50 type (3 bar A.C.)			Medium loaded lines	\$29.00
1317CR	1600	50 type (3 bar A.C.)		21 type	Medium loaded lines	30.30
1317CP	2500	50 type (3 bar A.C.)			Heavy loaded lines	29.30
1317CS	2500	50 type (3 bar A.C.)		21 type	Heavy loaded lines	30.60
1317CH	1000	22 type (3 bar A.C.)			Light loaded lines	<b>28.20</b>
1317CG	1000	50 type (3 bar A.C.)			Light loaded lines	28.70
1317CA	1600	50 type (3 bar A.C.)	1006A		Central office selective signaling	29.00
1317CB	2500	50 type (3 bar A.C.)	1006A		Central office selective signaling	29.00
1317CE	1600	50 type (3 bar A.C.)	1002A		Central office selective signaling	29.00
1317CT	1600 (biased)	50 type (3 bar A.C. and	1004A		Signaling central secretly	30.00
	, ,	pulsating)			•	
1317CU	2500 (biased)				Center checking	29.70
1317CK	2500 (biased)	50 type (3 bar pulsating)			Center checking	30.20

#### RINGERS OPERATED BY PULSATING CURRENT

#### Four-party Selective Signaling

1317CJ 2500 (biased) 22 type (3 bar A.C.) Any one of four parties \$28.80

#### RINGERS OPERATED BY HARMONIC CURRENT

#### Four or Eight-party Selective, Sixteen-party Semi-selective Signaling

Code No	Ringer	Frequency (Cycles)	Generator	Condenser	Service	List Price Each
1317CHA	41 type	162/s	22 type (3 bar *)	21 type	Harmonic selective signaling lines only	\$30.20
1317CHB	41 type	331/s	22 type (3 bar *)	21 type		30.20
1317CHC	41 type	50	22 type (3 bar *)	21 type		30.20
1317CHD	41 type	662/s	22 type (3 bar *)	21 type		30.20

\*Arranged to give alternating current, but contact springs are arranged so that approximately one impulse of current out of four is sent over the line.

†These prices include furnishing a No. 143AW composition shell receiver. If the No. 144AW hard rubber shell receiver is required add 50 cents to the list price of each telephone to be so equipped.

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# **MAGNETO TELEPHONES**

#### No. 1317 (3 Cell) Type

The battery, compartments in these telephones provide space for three standard  $2\frac{1}{2}$  x 6 inch dry cells. This number is recommended and usually employed on extremely long distance connection or under severe service conditions where maximum obtainable transmission is absolutely necessary. However, for local exchange and moderate toll service two standard Blue Bell dry cells have been found entirely satisfactory.

(a) The ringer furnished with this telephone has an inductive winding of approximately 1000 ohms and a non-inductive winding of approximately 3000 ohms, wound over the inductive winding of the spool. These two windings are connected in series and the junction brought out to an extra terminal for use in connecting an extension instrument or bell.

Two Blue Bell Batteries and one No. 60A protector are furnished with each telephone and are included in the price.

NOTE: If batteries are not desired, deduct 60 cents from the list price. If protector is not desired, deduct 50 cents from the list price.



No. 1317 (3 Cell) Magneto Telephone

#### RINGERS OPERATED BY ALTERNATING CURRENT

#### (Code Ringing)

Code No.	Resistance Ohms	Generator	Condenser	Service	†List Price Each
*1317N	1600	48 type (5 bar A.C.)	• · · · •	Medium loaded lines	\$29.60
*1317P	2500	48 type (5 bar A.C.)		Heavy loaded lines	29.90
1317R	1600	48 type (5 bar A.C.)	21 type	Medium loaded lines	30.90
13178	2500	48 type (5 bar A.C.)	21 type	Heavy loaded lines	31.20
*1317ÅH	1000	22 type (3 bar A.C.)		Light loaded lines	28.20
*1317AK	2500 (biased)	48 type (5 bar pulsating)		Center checking	30.80

#### RINGERS (BIASED) OPERATED BY PULSATING CURRENT

#### Four-party Selective Signaling

1317BS (a) 22 type (2 bar A.C.) Any one of four parties \$28.80



The No. 1305 type magneto telephones listed below are intended for use in places where a smaller telephone than the No. 1317 type is desired or made necessary on account of available space, the approximate dimensions of the backboard being  $7\frac{1}{2}$  inches wide by  $10\frac{5}{8}$  inches long.

No. 1305 Type

long.

This telephone has no space for batteries, nor is a writing shelf provided. The batteries in this case are supposed to be mounted in some out of the way place, either in a battery box or on a shelf.

Our recommendation regarding batteries is the same as referred to under the No. 1317 (3 cell) type telephone.

# RINGERS OPERATED BY ALTERNATING CURRENT (Code Ringing)

	(Code Minging)								
Code No.	Ringer Resistance, Ohms	Generator	Service	†List Price Each					
*1305R		48 type (5 bar A.C.)	Medium loaded lines	\$28.50					
*1305A		50 type (3 bar A.C.)	Medium loaded lines	28.00					
*1305N		48 type (5 bar A.C.)	Heavy loaded lines	29.00					
*1305A	T 2500	50 type (3 bar A.C.)	Heavy loaded lines	28.40					
*1305P	100C	22 type (3 bar A.C.)	Light loaded lines	<b>27</b> .00					

No. 1305 Magneto Telephone

# RINGERS OPERATED BY PULSATING CURRENT (Four-party Selective Signaling)

1305U 2500 (biased) 22 type (2 bar A.C.) Any one of four parties request

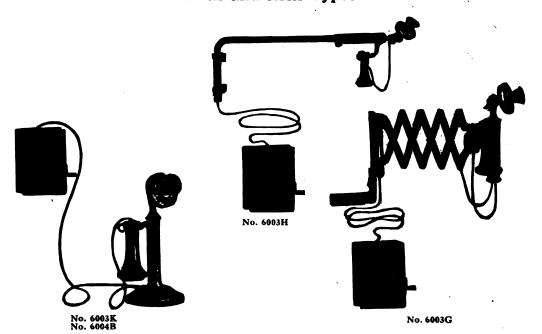
The above prices on 1305 type telephones do not include either batteries or protector, and these should be ordered separately as desired.

\*Arranged for a condenser to be wired in the receiver circuit, but not so equipped unless specified on order.

†The above list prices include furnishing a No. 143W composition shell receiver. If the No. 144AW hard rubber shell receiver is required, add 50 cents to the list price of each telephone to be so equipped.

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# MAGNETO TELEPHONES Desk and Arm Types



The Following Prices Do Not Include Either Batteries or Protector, and These Should Be Ordered Separately as Desired

# SERVICE DATA AND LIST PRICES RINGERS OPERATED BY ALTERNATING CURRENT (Code Ringing)

			Desk	Ringer			†List
Code	Desk	Telephone	Set	Resist-			Price
No.	Stand	Arm	Box	ance, Ohms	Generator	Service	Each
6003B	1020AL		315H	1000	22 type (3 bar A.C.)	Light loaded lines	<b>\$</b> 30.30
6003G		1048AC	315H	1000	22 type (3 bar A.C.)	Light loaded lines	35.50
6003H		1020AC	315H	1000	22 type (3 bar A.C.)	Light loaded lines	40.50
‡6004B	1020AL		300K	2500	48 type (5 bar A.C.)	Heavy loaded lines	32.20
‡6004C	1020AL		300L	1600	48 type (5 bar A.C.)	Medium loaded lines	32.00
‡6004D	1020AL		300 A A		50 type (3 bar A.C.)	Heavy loaded lines	36.50
‡6004E	1020AL		300AE	1600	50 type (3 bar A.C.)	Medium loaded lines	36.20
6025A	1320CN		315G	50	22 type (3 bar A.C.)	Series lines	<b>30.40</b>
-	37 40001	~ 11 . 11					••

The No. 1020AC adjustable arm is furnished for use on flat top desks or tables and has a radius adjustment of from approximately 35 to 48 inches.

The No. 1048AC arm is a collapsible, swinging arm mounted on top of a desk or table.

Length of arm closed, 93/4 inches. Length of arm extended, 241/2 inches.

# RINGERS OPERATED BY PULSATING CURRENT (Four-party Selective Signaling)

6003C 1020AL ..... 315J 2500 22 type (2 bar AC...) Any one of four parties \$31.00 (biased)

# RINGERS OPERATED BY HARMONIC CURRENT (Four or Eight-party Selective or Sixteen-party Semi-selective Signaling)

Code	Desk	Desk Set	Frequency			*List Price
No.	Stand	Box	(Cycles)	Generator	Service	Each
6031A	1020AL	354A	331/8	22 type (3 bar *)	}	<b>\$</b> 32.50
6031B	1020AL	354E	50	22 type (3 bar *)	Harmonic selective	32.50
6031C	1020AL	354F	$66\frac{2}{3}$	22 type (3 bar *)	signaling lines only	32.50
6031D	1020AL	354G	1628	22 type (3 bar *)		. 32.50

\*Arranged to give alternating current, but contact springs are arranged so that approximately one impulse of current out of four is sent over the line.

†These prices include a No. 143AW composition shell receiver. If the No. 144AW hard rubber shell receiver is desired 50 cents should be added to the list price of each telephone to be so equipped.

‡Arranged for a No. 21 type condenser to be wired in the receiver circuit, but not so equipped unless specified on order.

Portable Telephones

tem Electric

No. 1533 Telephone

The Western Electric Company manufactures two general types of central battery telephones: (a) Induction Coil Type

(b) Series Type) Series telephones are very satisfactory on short subscriber lines (one or two miles), but on long lines (over two or three miles) the transmission efficiency is somewhat less than our induction coil apparatus.

#### Induction Coil Telephones Equipped with transmitter, receiver, induction coil, condenser and ringer.

# Ringers Operated by Alternating Current Individual, 2 Party Selective or 4 Party Semi-selective

	WALL TELEPHONES	*List Price
Code No.	Ringer	Each
1533A	1000 ohms (biased)	\$20.00
	DESK TELEPHONES	

Code No. Ringer Desk Stand Desk Set Box 1020AL 6054A 1000 ohm (biased) 534A \$23.30

#### Ringers Operated by Harmonic Current 4 or 8 Party Selective or 16 Party Semi-selective Signaling WALL TELEPHONES

Code No.	Ringer	
1533E	331/3 cycles	\$21.70
1533F	50 cycles	21.70
1533G	66% cycles	21.70
1533H	$16\frac{2}{3}$ cycles	21.70

#### **DESK TELEPHONES**

Code No.	Ringer	Desk Stands	Desk Set Box	
6054E	331/3 cycles	1020AL	534E	\$25.50
6054F	50 cycles	1020AL	534F	25.50
6054G	66 2/3 cycles	1020AL	534G	25.50
6054H	$16\frac{2}{3}$ cycles	1020AL	534H	25.50

Central battery telephones for 4 party selective ringing with ringers operated by pulsating or superimposed current can also be furnished. Write for particulars.

## Series Telephones

Equipped with transmitter, receiver, condenser and ringer.

#### Ringers Operated by Alternating Current Individual, 2 Party Selective, or 4 Party Semi-selective Signaling

WALL TELEPHONES

Code No.	Ringer	
1533K	1000 ohm (biased)	\$18.90
	DESK TELEPHONE	

Code No. Ringer Desk Stand Desk Set Box 1020AH 6054K 1000 ohm (biased) 534K \$22.20

# No. 1320 Police Telephone



No. 6054 Telephone





No. 1320-Outer Door Open

A weatherproof central battery telephone, inclosed in a cast iron box and specially adapted for police patrol service. All apparatus is mounted on a frame which can be removed as a unit from case. Equipped with unbiased 1000 ohm ringers and intended for straight alternating ringing only.

Code No. List Price Each

\*List prices include furnishing a No. 143AW composition shell receiver. If the No. 144AW hard rubber shell receiver is required, add 50 cents to the list price of each telephone to be so equipped,

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List Price

Each

#### CENTRAL BATTERY TELEPHONES

# Telephones for Use with No. 1801 Switchboards Systems A, B and C

Series Telephones

These telephones are recommended for use with No. 1801 switchboard systems A, B and C in local service only, that is, in connection with switchboards which do not have connection with an outside exchange. They are equipped with a direct current 140 ohm vibrating bell or buzzer, transmitter and receiver.



No. 1327H

WALL TELEPHONES

Code List Price Case and Finish Mounting Receiver Each No. Watch case type 1327H Wood-Golden oak\* Non-flush Metal—Brush brass Metal—Black enamel 1339NM Flush Watch case type \ On request 1533N Non-flush Hand receiver \*Furnished in ebony finish at same price as oak finish.

**DESK TELEPHONES** 

Code
No.

Description

Each

6034AU

Consists of a No. 1020BJ black desk stand equipped with a watch case receiver. Has a buzzer in the base.....

6034AT

Consists of a No. 1020BH black desk stand equipped with a watch case receiver. Has a separate direct current vibrating bell.

Consists of a No. 1020BH black desk stand equipped with a watch case receiver. Has a separate direct current vibrating bell.



Code

No.

No 1339 Type

# Induction Coil Telephones

These telephones are recommended for use with No. 1801 switchboard systems "C," which have lines connecting the system or switchboard with an outside exchange. They are equipped with a direct current 140 ohm vibrating bell, induction coil, standard long distance transmitter and a bipolar hand receiver.

#### WALL TELEPHONES

Mounting

1293AR 1533M	Wood—Golden oak Metal—Black enamel	Non-flush } Non-flush }	On request	
	DESK TEL	EPHONES	<b>.</b>	
Code No.	Desk Stand	Desk Set Box	List Price Each	
6000AE	No. 1120CN (Black finish)	No. 295AU Non-flush (Golden oak finish)	On request	

# System D

Any standard central battery telephone with ringers operated by alternating current either induction coil or series type can be used with System D. However, induction coil apparatus, such as the No. 1533A wall telephones or No. 6054A desk telephones, are recommended where connection is made to an outside exchange.



No. 6034AU



Case and Finish

No. 1533



Telephones

#### TELEPHONE SWITCHBOARDS AND SYSTEMS

#### General

The line of non-multiple type switchboards is complete and includes designs that will satisfy every demand for telephone exchange equipment.

Magneto switchboards are offered in capacities varying from 4 to 330 lines.

Private Exchange (P.X.) and Private Branch Exchange (P.B.X.) switchboards, such as our sectional unit type, range in capacities from 20 to 80 lines and over. P.X. and P.B.X. boards are also made up in either desk or cabinet style, ranging in capacity from 60 to 600 lines.

Toll switchboards are offered in either desk or cabinet style and have capacities from 40 lines upward. Common battery non-multiple switchboards are of the cabinet type and range from 260 to 520 lines in

capacity.

Multiple type equipments are also manufactured for regular exchange use, for private branch exchanges and for toll offices. These equipments range in capacity from 300 lines to 10.500 lines.

Due to the varied requirements existing for multiple type equipments, these are not standardized to the same extent as are the non-multiple line of switchboards.

We will, upon request, gladly make studies, recommend equipments and furnish engineering data and prices applying to any type of switchboard.



No. 106B Switchboard Wall Type

# No. 106B MAGNETO WALL SWITCHBOARD Drop Type

The No. 106B switchboard is intended for exchanges where the total number of lines will not exceed 10.

The cabinet is of walnut.

The equipment for each line consists of a 500 ohm drop, bridged

across the line, and a jack.

The equipment for answering, originating and supervising calls consists of four cord circuits with supervisory drop signals, listening jacks and a listening cord.

Equipment for one toll line is also supplied with this switchboard. The operator's telephone set, furnished with the switchboard, consists of a long distance transmitter and receiver. Other equipment consists of a night alarm circuit, a five-bar hand generator, and a night alarm key.

In operating the switchboard, the operator answers and listens in with either one of the two duplicate listening cords provided for the purpose. Connections are made by means of the other cords without

the use of keys. Ringing is done over the listening cord with the hand generator.

# No. 1012 MAGNETO WALL SWITCHBOARD Ringer Type

The No. 1012 switchboard is intended primarily for small telephone systems of ten lines or less where it is not feasible to have a regular switchboard operator in attendance.

The cabinet is made of a light finish quarter-sawed oak, having a door hinged in front to facilitate inspection of apparatus and wiring.

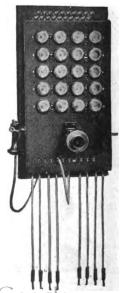
Equipment for each line consists of a 1000 ohm ringer. 1600 or 2500 ohm ringers can be furnished if required. Ringer indicators are supplied with each ringer so that the operator, if not in attendance when a bell rings, can tell which line has called.

The equipment for answering and originating calls consists of four cord circuits, listening jacks, and a listening cord. No supervisory or ring-off signals are provided.

The operator's telephone set, furnished with the switchboard, consists of a long distance transmitter and receiver. Other equipment consists of a powerful five-bar hand generator.

In operating the switchboard, the operator answers and listens in with the listening cord and plug provided for the purpose. Connections are made with the other cords without the use of keys. Subscribers are called by ringing with the hand generator through the listening cord.

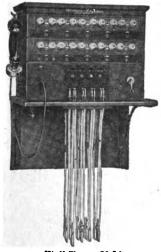
Write our nearest house for particulars.



Digitized by No. 1012 Switchboard Wall Type

# No. 1800 MAGNETO SWITCHBOARD

#### Sectional Unit Type



This type of switchboard corresponds in general design to the familiar sectional unit bookcase, and is offered for installations that are comparatively small at the start but are expected to grow rapidly. and where the needs for the future are indefinite. An ultimate capacity of 50 lines has been set arbitrarily as the maximum that should be used with this type of switchboard. With a low calling rate, however, it is safe to assume that as many as 70 or 80 lines can be accommodated.

To meet various requirements, there are different types of base or supporting units, cord units, line units and top units. To assemble a board it is then necessary to select, first, a base unit; second, a cord unit; third, one or more line units, and finally a top unit. These assemble readily in the order given, and provide a perfectly practical switchboard to which additional line units may be added at any time.

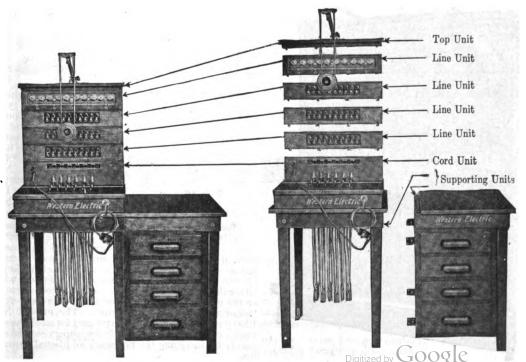
Easy to assemble a switchboard for any line or operation condition.

Necessary to buy only as much equipment as needed, switchboard capacity readily increased (by adding line units) as business grows, no investment lying idle.

All terminals and apparatus instantly accessible.

Apparatus, material, construction and finished product are standard Western Electric Quality Products. the best that can be produced.

Write our nearest house for particulars.



Method of Enlarging No. 1800 Switchboard-Capacity up to 50 lines

# No. 1200 TYPE MAGNETO SWITCHBOARDS Non-multiple—Automatically Restored Line Signals



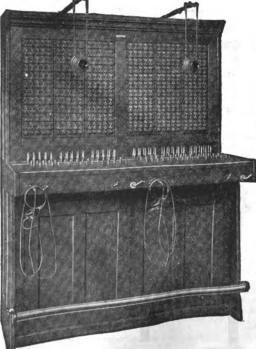
No. 1220D Switchboard

The No. 1200 type switchboard series (Code Nos. 1220 to 1259) is designed for the medium size magneto exchange. The switchboards range in capacity from 105 lines to 330 lines. Additional capacity may be obtained by lining up two or more sections and making use of transfer trunks.

For exchanges where the ultimate capacity will exceed 330 lines non-multiple magneto switchboards are not recommended because of the resulting lower operating efficiency and lower grade of service. In such cases central battery or multiple type magneto switchboards should be installed.



No. 1240D Switchboard



No. 1250D Switchboard

Switchboard Code No. (See Note 1)	No. of Positions	Line Capacity	Cord Capacity (See Note 2)	Line Cable Pairs
1220	1	105	15	105
1020	o f left	105	15	105
1230	2 right	105	15	105
1240	1	165	15	165
1050	of left	165	15	165
1250	2 right	165	15	165

Note 1. The No. 1200 type magneto switch-boards may be equipped with either No. 2 ball type combined jacks and signals and No. 10 ball type push button restored supervisory signals or No. 22 shutter type combined jacks and signals and No. 34 shutter type supervisory signals. Boards equipped with ball type signals are described by adding the suffix "C" to the switchboard Code Nos.; as for example, No. 1240C switchboard. Boards equipped with shutter type signals are described by suffixing the letter "D" to the switchboard. Code No.; as for example, No. 1230D switchboard.

Note 2. The No. 1200 non-multiple magneto switchboard is furnished with either single or double supervision cord circuits. Single supervision boards may, if desired, be equipped with five cord circuits having toroidal repeating coils and switching keys. Double supervision boards may be equipped with either the condenser type "non-hang-up" cord circuits, or the condenser repeating coil type "non-hang-up," "non-ring-through" cord circuits. The present No. 1200 types of switchboard, if arranged for single supervision, may be changed to a double supervision board simply by installing the necessary additional apparatus.

Write our nearest house for particulars.

# No. 1801 CENTRAL BATTERY PRIVATE EXCHANGE SWITCHBOARDS

#### Sectional Unit Type



No. 1801 Switchboard

Desk Type

Systems B, C or D

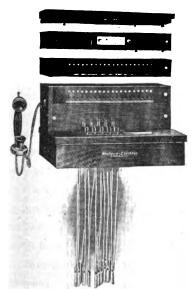


No. 1801 Switchboard Wall Type System A

The No. 1801 sectional unit type switchboards have been designed for small private exchanges or private branch exchanges, serving from 20 to 60 lines. Equipments having capacities up to 120 lines can also be furnished if required.

This type of board is constructed along the same lines as the No. 1800 sectional unit type magneto board. (See preceding pages.) They differ in that the No. 1801 has lamps for the line and supervisory signals.

The units of the No. 1801 switchboard are finished in birch, mahogany or light oak. Inside of switchboard units are shellacked to prevent warping. The frameworks are carefully and rigidly assembled. The apparatus is of the same quality as that used in the larger central battery equipments. Wiring is in cable form.



No. 1801 Switchboard Showing Method of Enlarging

#### FOR THE INFORMATION OF CUSTOMERS

Operating telephone companies, as a rule, do not permit connections with their wires, switchboards or telephones, of any apparatus or attachments not owned or maintained by them.

Four different systems—A, B, C and D—have been devised to meet the various classes of service required in this type of switchboard. Telephones which can be used with these systems are listed on preceding pages under heading: Central Battery Telephones.

\*System A. Provides for communication from any telephone to switchboard only. No means are available for connecting two telephones together and none for connections to the public telephone system.

\*System B. Same as System A but also arranged for connecting any two telephones together.

\*System C. Same as System B but also provides for connections to a central battery or a magneto central office.

\*Note: Direct current is used for ringing the telephone bells in Systems A, B and C.

System D. Provides the same service as System C, except that alternating current is used for ringing the telephone bells. This makes it possible to use standard central battery telephones with polarized ringers and induction coils.

Write our nearest house for particulars. State which system is best suited for your requirements,

#### Nos. 1262-1350 CENTRAL BATTERY P.B.X. SWITCHBOARDS

These switchboards are designed for use as branch exchange equipments connecting with a public telephone system. They are of the central battery type, making use of lamp line signals and lamp supervisory signals. This makes possible rapid and reliable operation. The line signal is associated directly with the corresponding jack so that the operator can plug in directly above the lighted lamp.

Supervision is positive as the signal is closely associated with the corresponding cord.

The current supply may consist of a storage battery at the private branch exchange, charged either over separate conductors or trunks from the central office or from charging equipment at the private branch

exchange. It may also be furnished direct from the central office storage battery over a trunk line.

The trunks from the central office terminate in cords and plugs. These plug-ended trunk circuits reduce the number of connecting cords required with the board. The use of one cord instead of two makes for ease in handling and does not tie up the connecting cord circuits. Incoming calls from the central office are completed directly by operator without the use of local cord circuits. This results in increased transmission efficiency

Holding jack circuits up to the number of five are also provided for each trunk circuit equipped to hold an exchange trunk without tying up a local line. This feature is valuable when the called-for line happens to

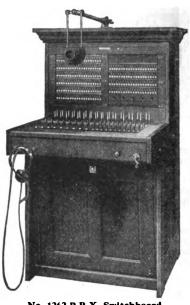
be busy.

These private branch exchange switchboards are furnished in one and two-position cabinet or desk types in either birch, mahogany or oak finish.

Write our nearest nouse for particulars.



No. 1302 P.B.X. Switchboard Desk Type



No. 1262 P.B.X. Switchboard Cabinet Type

Digitized by GOOGIC

			Capacity Wired Including			Cord Circuit	Plug	
		Number	Number		ne	Capacity	Ende	d
Code		of	Arranged	Rel	ay	Number Trunk		ks .
No.	Туре	Positions	for Relays	Capacity	Wired	Wired	Capacity	Wired
1262	Cabinet	1	200	40	20	10	10	5
1272	Cabinet	2	∫ L. pos. 200	40	20	10	10	5
		-	(R. pos. 200	40	20	10	10	5
1280	Cabinet	1	300	40	20	10	10	5
1290	Cabinet	2	∫ L. pos. 300	40	20	10	10	5
		_	R. pos. 300	40	20	10	10	5
1302	$\mathbf{Desk}$	1	200	30	15	10	10	5
1320	Desk	1	60	30	15	10	10.	5
1321	$\mathbf{Desk}$	1	100	30	15	10	10	5
1322	$\mathbf{Desk}$	1	200	30	15	10	10	5
1330	Desk	1	300	30	15	10	10	5
1342	Desk	2	∫ L. pos. 200	30	15	10	10	5
1012	Desk	2	·) R. pos. 200	30	15	10	10	5
1350	Desk	2	∫ L. pos. 300	30	15	10	10	5
1000	Desk	. 4	R. pos. 300	30	15	10	10	5

Total Line

FOR THE INFORMATION OF CUSTOMERS Operating telephone companies, as a rule, do not permit connections with their wires, switchboards or telephones, of any apparatus or attachments not owned or maintained by them,

No. 1248A Switchboard

# No. 1248A AND No. 1258A CENTRAL BATTERY NON-MULTIPLE SWITCHBOARDS

These central battery non-multiple switchboards are designed for serving central battery telephone lines and a small number of magneto lines. With the exception of central battery boards of the multiple type they are the largest made.

The No. 1248A one-position board is best adapted for use where the number of central battery lines will not exceed 240; the No. 1258A two-position board where the maximum will be 480 lines.

Central battery lines are arranged with lamp signals and relays for controlling the lamps as in the large multiple type boards.

Magneto lines terminate in combined jacks and signals.

		Central Battery	Magneto	Cord
Code		Line	Line	Circuit
No.	Positions	Capacity	Capacity	Capacity
1248A	1	240	20	15
10504	∫ left .	240	20	15
1258A	2 right	240	20	15

Cord circuits are arranged with lamp supervisory signals, giving positive supervision. Any or all cord circuits can be arranged to operate as straight central battery, combination central battery and magneto, or full universal.

In the universal circuits, toroidal type repeating coils will be furnished if specified. When these are furnished, a cut-out key is used so that if two magneto lines are connected, the repeating coil may be either cut in or out of circuit. When a magneto and central battery line are connected, the repeating coil equipment will serve to eliminate noise.

Various ringing combinations are available. To provide for any of these, universal wiring is installed to connect the different types of cord circuit keys.

Suspended type transmitters are usually furnished, but chest type transmitters will be supplied, if ordered.

Write our nearest house for particulars.



No. 1258A Switchboard

No. 1336 Mine Telephone

# MINE TELEPHONE SYSTEMS

Mine telephone systems usually consist of several instruments connected to one pair of wires, forming a

Local battery magneto telephones are used and signaling is done by code rings.

The severe conditions encountered under ground, due to moisture, gases, acidulated water, etc., make it necessary to provide unusually well protected telephone instruments for this service. For use above ground. such as in the engine room, superintendent's office, etc., in conjunction with the mine system, standard wall or desk type telephone instruments can be used unless it is proposed to place them in exposed locations. In that event the metal case telephones should be used, the same as used below ground.

When the mine system requires more lines than one, they should be terminated in a switchboard located

at some central point, such as the superintendent's office or engine house.

Switchboards suited to every requirement or condition are described elsewhere in this catalog under the heading of Switchboards.

Write for a copy of booklet, "Mine Telephone Systems and How to Install Them," sent you on request.

# No. 1336 Type

The No. 1336 type metal mine telephone is fireproofed, moisture proofed and rustproofed. Its iron case is curved at the top so that water and falling

objects will easily slide off.

The apparatus inside the case is doubly protected from moisture, acid fumes and gases by two iron doors, and special treatment given each part to resist the action of such disturbing elements. When the inner door is closed only the metal transmitter mouthpiece, receiver, cord (impregnated with a moisture resisting compound) and the generator handle are exposed. When the outer door is closed even these parts are protected. In using the set it is evident that only the outer door need be opened.

Ringers or Bells. The instrument is equipped with a high-efficiency

ringer which is so designed that it is nearly impossible to get out of

adjustment.

The gongs emit a very loud, distinct ring and are given a special finish

to prevent corrosion.

It is often desired to provide loud-ringing extension bells, in conjunction with the telephone instruments at certain points when conditions are such that the bells furnished with the sets are not adequate. In this event, ringers or bells as a part of the instrument are unnecessary, and we are prepared to furnish telephones without bells when so specified in the order.

Generator. The telephones are equipped with a 5 bar hand generator powerful enough to satisfactorily ring 40 telephones connected across the same line. All exposed parts are heavily galvanized and the

armature winding is impregnated with moisture proofing compound.

Moisture proofed Parts. The receiver cord, windings of the receiver, ringer coils and induction coils are impregnated with a compound to protect them from moisture and gaseous fumes and all permanent terminal connectors are also imbedded in the same compound. All interior wiring is done with heavy copper wire insulated with a high grade of rubber. These wires are formed and laced together into cables, which protect them from injury and also present a neat and compact arrangement.

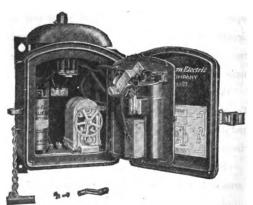
Two cells of standard dry battery are required for each telephone to furnish the talking In ordering batteries for telephones in use in underground or in damp locations, specify that they

be furnished with "special impregnated cartons."

Code		List Price
No.	Description	Each
1336A	Metal case mine telephone, without ringer	<b>\$</b> 69.00
1336E	Metal case mine telephone, equipped with 2500 ohm ringer	73.50



No. 1336 Mine Telephone (Outer Door Open)



No. 1336 Mine Telephone (Outer and Inner Doors Open) Digitized by GOO

# MINE TELEPHONES Telephones for Above Ground Service

In the superintendent's office, engine house and other day and protected parts of the plant which should have communication with each other and the mine, the No. 1317 standard wooden case magneto telephone and No. 6004 desk stand magneto telephone, listed in the preceding pages, can be used and are recommended. These telephones have been designed to meet the most exacting requirements of telephone service, and are standard with the largest telephone companies for heavy duty magneto service.

# Mine Telephone Extension Bells

It is often desired to place a bell at some point distant from the telephone thus permitting the instrument to be located in a more or less sheltered position and still make it possible for the signals to be heard over quite an area. For this use two types of bells can be furnished. The No. 127 and the Nos. 392 and 342 types. These are listed under the heading Extension Bells elsewhere in this catalog.

Bells having ringer coils wound to either 1000 or 2500 ohms resistance can be furnished. In using these

bells on lines in connection with telephones of other manufacture, the 1000 ohm type is recommended.

No. 127 Type. The No. 127 type is recommended for use above ground in dry, protected locations where a bell having the same sound volume as the bell furnished with the telephone instrument is satisfactory.

Where a loud-ringing bell is required, the No. 392 or No. 342 types are recommended.

Nos. 392 and 342 Types. These extension bells are thoroughly protected against moisture, having impregnated coils and all exposed metal parts galvanized. They are so designed and constructed that it is almost impossible for them to get out of adjustment. However, they can be quickly and easily adjusted, if

necessary The No. 392 is furnished equipped with 6 inch gongs. The No. 342 is also regularly equipped with 6 inch gongs and is mounted on a wooden backboard with canopy, as a protection against falling material; in

case 8 inch gongs are required they can also be furnished.

# Mine Telephone Protectors

It is customary to protect mine telephone instruments against lightning discharges and accidental crosses with lightning or power circuits. It is generally recognized by telephone authorities that a protector should be placed as near as possible to where the line wires enter the building, as by this method protection

is afforded the inside wiring, the instrument and the building itself.

We manufacture several different types of protectors for use with telephone apparatus. The No. 60A protector is intended for protection against lightning only in locations where there is no chance of contact with electric light or power wires, and the No. 12A protector for protection both from lightning and foreign electric currents. This apparatus is listed under the heading "Protectors." electric currents.



No. 343A Mine Signaling Set

# Mine Signaling Sets

To provide a reliable system for electrical signaling in mines we have designed the No. 343A signal set which consists of a strong iron case containing a 5-bar No. 48D hand generator and two terminals. The line wires are brought into the set through a hole in the bottom.

On the front of the outer door a small box having a glass window is provided in which is hung the padlock key. In case of emergency this window must be broken in order to open the set and turn the generator crank.

No. 48D Generator. The No. 48D generator furnished with this signaling set will ring 30 No. 342, 2500 ohms signal bells connected on a 7½ mile full metallic line of No. 12 B.W.G. iron wire or a 281/2 mile line of No. 12 B.&S. hard drawn copper wire.

It has all exposed metal parts galvanized to make them rustproof and the armature winding is impregnated with a moisture proof

compound.

It is mounted inside the metal case and is made proof against dust and dirt by the iron plate which is held firmly against an iron shoulder with large screws. The generator handle only protudes through the plate, and all other mechanism and wiring is entirely encased even when the outer door is open.

List Price Code Description Each No. 343A On request Mine signaling set.....

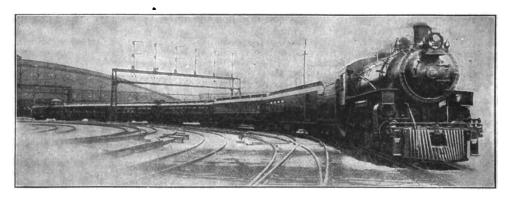
# Signal Bells

For receiving the signals either the No. 392 or No. 342 type loud-ringing bells can be used. These bells are alike in design and construction only the No. 342 type is mounted on a wooden backboard with a canopy for extra protection from falling rocks or other objects. (See above description of mine telephone extension bells.)



No. 343A Mine Signalini, Sat (Outer Door Open)

# RAILROAD TRAIN DISPATCHING SYSTEMS



We have not attempted to list here detailed information with regard to railroad train dispatching telephones and selective apparatus, but only wish to call attention to the fact that we are prepared to furnish complete equipments, especially adapted to any service requirement.

Write our nearest distributing house for detailed information.

Street Railway Telephone Systems

City and suburban electric railways are finding the use of telephone dispatching a profitable method of controlling the movement of their cars. In general an 1800 switchboard is used at the office. Connected to the board are a number of telephones along the line at terminals, short-line points, important traffic centers and intersections, railroad crossings, canal or river crossings and company buildings. For protected places, standard magneto telephones of the 1317 type are used. For unprotected places the 1278 type telephone is better suited.

Im some cases it is advisable to equip the cars with portable sets of the No. 1330 or 1331 types, which can be connected to the line by means of No. 186 type jacks mounted on poles along the tracks.

Portable Magneto Telephone of No. 1375 Type

This is a complete portable magneto telephone for connecting to metallic or grounded lines and capable of ringing the bells on a heavily loaded circuit. The apparatus is compactly mounted on an aluminum frame which can be easily removed as a unit

No. 1375B

from the case for inspection or adjustment when necessary. The line and ground terminals are conveniently mounted on a terminal plate directly under the cover. The equipment consists of a standard No. 1001 type hand set, induction coil, generator, 2150 ohm buzzer for receiving signals and a No. 703 Eveready dry battery.

This portable telephone is especially adapted for line patrolmen and others who

are frequently out of reach of a permanent telephone station and who must carry a light and compact telephone for communicating to headquarters quickly in an emergency.

The following equipment is intended for use with these sets, but will not be furnished unless specified in the order:

One bayonet type ground rod per Spec. D-313 provided with a brass scabbard and a 10 foot connecting wire for attaching to set.

One line connection wire per Spec. D-311 consisting of a 40 foot length of No. 14 B. & S. flexible rubber covered and braided copper wire, equipped with tips at each end and having a 4 inch bared space at the middle.

The usual method of connecting this telephone to the line is either by means of a line pole or by means of the line connecting wire. This wire is thrown over the line and held in such a position that the bared wire is in contact with the line wire, and either one or both ends of the wire being connected to one terminal of the telephone, the other terminal being connected either to the ground by means of a bayonet ground rod or other ground connection, or to the other line wire by means of another line connecting wire in the case of a metallic circuit.

Code No. 1375B	Hand Set 1001H	Generator No. 29E	Buzzer 2150 ohms	Battery . No. 703 Eveready	Weight $10\frac{1}{2}$ lbs.	List Price Each \$75.50
Spec. D-3	11		(As describ	ped above) Digitized by	Google	\$1.40

**BAYONET GROUND ROD** See D-313 (As described above)

\$6.60

# STREET RAILWAY TELEPHONES

# No. 1278 Type



This is a weatherproof iron box telephone designed to be fastened to poles along a street railway line. The following apparatus is mounted on a removable base:

No. 48 type (5 bar A.C.) generator, ringer, induction coil, two fuses, two open space carbon cutouts, and automatic door switch which is operated by the opening and closing of the door, and a No. 25 type repeating coil. The repeating coil insulates all metallic connection between the line and telephone instruments. The ringing current and talking currents are both transformed through this coil either out over the line or into the instrument, as the case may be. Closing the door operates the door switch and disconnects the repeating coil from the line, and also breaks the local transmitter battery circuit. This prevents current from passing through the repeating coil except when the telephone is in use, and also prevents any unnecessary drain on the battery.

The lower part of the case is arranged to hold two dry cells and the No. 1001 type hand set and cord when not in use. The cord used is weatherproof and of sufficient length to enable the user to stand in a comfortable position while talking.

The No. 1278G telephone is provided with a lock so constructed that after the key has been inserted and the door opened the key is held tightly in place and cannot be removed until the door has been properly closed again. This serves to insure the closing of the door before the user returns to his car.

Code			Hand	Door		*List Price
No.	Generator Generator	Ringer	Set	Lock	Fuses	Each
1278G	48C (5 bar A.C.)	51A (1000 ohms)			Two 500 volt, 1 ampere	
1278H					tuted for the 5B lock, thus	
	permitting stand	dard switch locks to	be used	. <b></b>		request

\*The above prices do not include batteries; these should be ordered separately as desired.

# Portable Magneto Telephones in Wooden Cases



No. 1331E

These portable telephones are intended for connecting to regular bridging magneto lines, and are equipped with a standard local battery circuit.

They are contained in substantial wooden cases made of hard maple, having the corners reinforced with aluminum brackets. Cases are regularly furnished with a substantial leather suitcase handle. If so specified on the order, however, a broad leather shoulder strap can be furnished in place of the handle or in addition to it.

The Nos. 1330F and 1331F are equipped with a six foot cord and No. 146 plug for connecting with the line through a No. 186 pole jack.

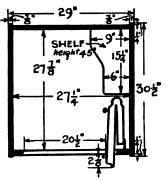
Condensers are not furnished unless so specified on order.



No. 1331E

Code No.	Method of . Connecting to Line	Ringers	Generator	Service	†Batteries Used	Approx. Weight Complete	List Price Each
1330F	No. 146 plug	32BG	48A (5 bar)	Heavy loaded lines	2 Blue Bell	28 lbs.	\$82.00
1331F	and cord No. 146 plug and cord	(2500 ohms) 3B buzzer (2500 ohms)	22A (3 bar)	Light loaded lines	1 No. 792 Eveready	17 lbs.	On request

# Western Electric TELEPHONE APPARATUS

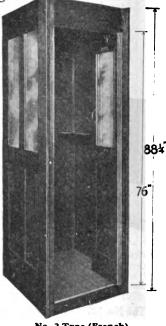


# No. 2 Type (French)

# Telephone Booths

# No. 2 Type Folding Door Telephone Booths (French)

This type booth makes use of a folding door which can be closed and opened by pulling the handle. It remains in any position and will stay closed without the use of catches. There are no tracks upon the floor to gather dirt and become clogged. The ventilation is perfect.



No. 2 Type (French)

No. 2 Type (French) door, when operated, extends only four inches beyond the face of the booth. The interior sides, back and ceiling are lined with sheet metal. The floor is of hardwood and the threshold is protected with safety tread. The booths can be furnished with five glass panels (two panels in upper part of door, two panels in left hand side and one panel in right hand side, door, two panels in left nand side and one panel in right hand side, facing booth) or they can be furnished with two glass panels in upper part of door only. With each booth a shelf is furnished, intended as an elbow rest. The door is always hinged on the right hand side (facing booth). The booths are properly crated for shipping without additional charge. Booths will be shipped set up, unless order specifically reads "ship knocked down." In such cases an extra charge is made.

List			rice Each
No.	Material	Finish	1 to 24
2A	Oak	Plain oak (2 glass panels in door)	<b>\$</b> 164.40
2B	Birch	Dark mahogany (2 glass panels in left side)	164.40
2C	Birch	Light mahogany (1 glass panel in right side)	164 . <b>40</b>
2G	Oak	Plain oak (2 glass panels in door only)	150.00
$^{2}\mathrm{H}$	Birch	Dark mahogany (2 glass panels in door only)	150.00
2J	Birch	Light mahogany (2 glass panels in door only)	150.00
Bootl	h seats (extra)	)	\$4.60
Char	ge for knockin	ng down booths	2.00

FOLDING DOOR BOOTHS (SEAMAN)

These booths are made so as to occupy the smallest space possible, but roomy enough for the comfort of the user. By the folding door device no space outside of the booth is needed for closing and opening the door. The booths are substantially built and a shelf is furnished in every booth.

2S	Folding door	Plain oak	\$120.00
2S	Folding door	Mahoganized birch	128.00

SWINGING DOOR TELEPHONE BOOTHS (SEAMAN)

These booths are sound proof and have double interchangeable walls forming a complete interior shell, surrounded by a complete exterior one with an air space between, thereby excluding outside noises. The booths are equipped with a double door. Each door swings on its own set of hinges. Only one knob is used with the door. If not specified otherwise, the booths will be supplied with doors swinging to the right. Sides of glass of panels are made interchangeable so that when one glass side is ordered it may be placed either to right or left of the door at the option of the user.

List	Size-				List Price
No.	• Outside	Inside	Finish	Glass	Each
20	*32 x 39 ins.	32 x 26 ins.	Plain oak	In door only	\$124.90
20	*32 x 39 ins.	32 x 26 ins.	Plain oak	In door and one side	135.00
21	$*44 \times 39 \text{ ins.}$	37 x 32 ins.	Plain oak	In door only	145.10
21	*44 x 39 ins.	37 x 32 ins.	Plain oak	In door only	145.10
21	*44 x 39 ins.	37 x 32 ins.	Plain oak	In door and one side	156.20
25	*31 x 37 ins.	26 x 32 ins.	Plain oak	In door only	94.50
25	*31 x 37 ins.	26 x 32 ins.	Plain oak	In door and one side	101.30
20A	*32 x 39 ins.	26 x 32 ins.	Plain oak	In door only	124.90
20A	*32 x 39 ins.	26 x 32 ins.	Plain oak	In door and one side	135.00
	*Not including shelf.	Shelf extra.			

Delivery F. O. B. Factory, Milwaukee, Wis. For warehouse deliveries write nearest house. All booths have the door on the wide side except when List No. is followed by capital "A," which indicates a booth with the door on the narrow end. Standard finish of the booth is plain oak. Prices for quartered oak, mahogany or cherry finish on request.

# TELEPHONE APPARATUS



# Lead Covered Telephone Cable

Cable for aerial and underground telephone use is composed of copper conductors, insulated with either one or two wrappings of paper, twisted into pairs and enclosed in a lead sheath. In general, cable with single wrapped conductors is recommended, since its electrical and mechanical characteristics are perfectly satisfactory for most conditions, and the cost is less than of cable with double wrapped conductors. Cable intended for interior construction usually has the conductors insulated with two servings of silk and one of cotton.

The insulated conductors may be enclosed in a sheath composed of commercially pure lead, an alloy of lead and tin, or an alloy of lead and antimony. Lead antimony sheath is recommended for aerial and underground construction. Lead-tin sheath can also be furnished if desired. Pure lead sheath is recommended for use only within buildings or in similar unexposed places. It is furnished, however, on cable intended for aerial or underground use where a cheap cable is desired.

# Extra Pairs

Extra pairs are placed in all cables containing conductors smaller than No. 16 gauge, to take care of any pairs which may become defective in manufacture. In the majority of cables, all or part of the extra pairs are good and may be used for additional circuits. All pairs of No. 16 gauge and larger, except in submarine cable, are guaranteed to meet the specification requirements when the cable leaves our factory.

# **Prices**

Owing to the fluctuations of the market price of raw material, it is impracticable to list prices on cable in a catalog. We will be pleased, however, to furnish full information and prices on request.

# Special Cables

Special conditions often require cables with different characteristics from those which have been standardized and coded. There is a Western Electric cable to meet every requirement. If your condition necessitates special cable write our nearest house giving full details and information and price will be furnished. A brief description of some of the most important of special cables is given below:

# Submarine Cables

Paper insulated submarine telephone cable may be divided into three general classes, depending upon the use for which they are intended.

1. High dielectric strength, tight core cable, designed for use in rather long lengths, that is, in lengths such that the cost of repairing a break in the cable will be less than the cost of an entirely new cable.

2. High dielectric strength, loose core cable, designed for use in rather short lengths where high transmission efficiency and high dielectric strength are of importance; for example, a short river crossing cable connecting important open wire lines.

3. Single paper insulated loose core cable designed for use in rather short lengths where so high a dielec-

3. Single paper insulated loose core cable designed for use in rauner short rengels. In the strength is not necessary; for example, a short river crossing cable connecting land cables.

Either single or double armored cable can be furnished. In most cases, the single armored cable is sufficient mechanical protection. The double armored cable is used only in cases of extremely severe sufficient mechanical protection. With a mud bottom, a single armor will be sufficient. With a rocky and uneven bottom with strong tides and currents, double armor should be considered.

# Composite Cables

Composite cable, or cable composed of conductors of two or more gauges can be furnished. binations of pairs which will utilize the space within the lead sheath most economically are somewhat limited and our cable engineers will make recommendations along this line upon receipt of detail information as to the conditions to be met.

# 1200 Pair Cables

A 1200 pair No. 24 gauge cable has been developed for underground use with a mean outside diameter of 25% inches. This type of cable is designed for short cables in congested districts.

# High Dielectric Strength Cables

Paper insulated cable designed to withstand potentials up to 1500 volts A.C. is manufactured for use where telegraph or signal circuits are to be carried through the cable.

List Price Each with 6 Ft.

No. 22 B.&S.

Gauge Cable

Attached \$14.50 18.10 25.30

# TELEPHONE APPARATUS Cable Terminals No. 8 Type

WITHOUT PROTECTORS

This terminal is for open wire distribution from lead-covered aerial cable, and is arranged for attaching to poles. No arrangement is made for protective devices. A six-foot No. 22 B.&S. gauge cable stub is standard, and will be furnished attached to assembled List Price Each terminal, unless otherwise ordered.

Prices	are F. O. B. Hawi		with 6 Ft.	
		Overall	Diameter	No. 22 B.&S.
Code	Capacity	Height	of Hood	Gauge Cable
No.	Pairs	(Less Cable Stub)	Inches	Attached
8A	10	$15\frac{3}{18}$	61/4	\$12.20
8B.	16	15 🚠	61/4	13.60
8C .	<b>26</b>	19 <del>‡į</del> į	61/4	18.30
8D	31	. 19 <del>‡į</del>	61/4	20.80
8T2	51	28 <del>11</del>	61/4	28.60

# No. 14 Type

# WITHOUT PROTECTORS

This is for open wire distribution from lead-covered aerial cable, and is intended to be mounted on poles or buildings. No arrangement is made for protective devices. A six-foot No. 22 B.&S. gauge cable stub is standard, and will be furnished attached to assembled terminal, unless otherwise ordered.

Prices are F. O. B. Hawthorne, Ill.



No. 8 Type

Cable Terminal

Open

-Cable Terminal No. 14C-

Code	Capacity	Length Includin
No.	Pairs	Nipples
14B	11	10
14C	16	12 <del>31</del>
14D	26	17 👯

No. 18 Type

WITH PROTECTORS

This is a protected terminal for open wire distribution from leadcovered aerial and underground cable. Inclosed in a black finished galvanized iron cover approximately 8 16 inches in diameter, provided with

a safety chain fastened to the mounting base.

Arranged for mounting on poles. Equipped with:

No. 7A fuses (7 ampere unless otherwise specified).

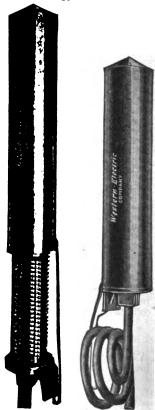
No. 1 protector blocks. No. 2 protector blocks.

No. 3 protector micas.

A six-foot No. 22 B.&S. gauge cable stub is standard, and will be furnished attached to assembled terminal unless otherwise ordered.

Prices are F. O. B. Hawthorne, Ill.

Code No.	Capacity Pairs	Length Inches	List Price Each Including Cable
18A 18B	10 15	19 🛂 22 🛂	\$30.00 38.30
18C	25	28 <del>}}</del>	54.10
18D 18E	30 50	33 <del>13</del> 46 <del>11</del>	71.80 102.20
18F	60	53 <del>   </del>	135.50



Width

of Cover

Inches

Closed Digitized No. 18E Cable Terminal

List Price

Each

\$12.40

\*List Price

Each

\$8.40

19.20

13.20

26.40

25.20

List Price

Each

12.70

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7K

# Code

not be deposited until the operator requests it. The switchboard cord circuits must be arranged for operation

This saves considerable time on the part of the operator. It may be wired so that the coin need

Nickels

Nickels

Type

Wall

Wall

Desk

Desk

Desk

in connection with these coin collectors.

# No.

# All electrical circuits are insulated from the case. The case has a heavy black japanned finish.

Code

No.

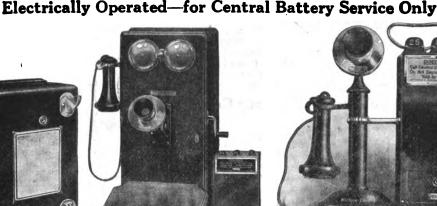
**8A** 11 13A

14

20 \*F. O. B. Hartford, Conn. The above Code Nos. and prices cover the coin collector box only and do not include telephone instrument.

No. 21W Condenser

# COIN COLLECTORS





No. 14 Mounted with a

No. 1020 Desk Stand

Depth

41/8

Size Inches

# No. 11 Mounted on a No. 1317 Wall Telephone

Coin Collector NO. 7 TYPE These are arranged so that a coin placed in the coin chute remains under control of the central office operator, who may refund or deposit it in the coin box. The coin collector is ordinarily connected to the telephone line so that it is necessary to drop a coin of the proper denomination into the box to signal central

-Approx. Dimensions, Inches-Arranged for

55/8 5 | 1 The No. 7K has a larger coin box than the No. 7J.

The Gray Automatic Pay Station

Coins Arranged for

Nickel

Nickel, Dime, Quarter

Nickel

Nickel, Dime, Quarter

Nickel, Dime, Quarter

are so equipped.

Code No.

21W

These coin collectors may be used on either local battery or central battery lines. The signals are given automatically on dropping the coin into the slot. No electrical connections are required. Approx.

Width

# 7 x 3 % x 3 1/8 9 x 4 1/2 x 3 9 1/2 x 3 1/2 x 3 1/4 11 x 4 1/2 x 3 1/2 10 3/4 x 4 1/4 x 3 1/4

Condensers '

Used in telephones on party lines where ringing trouble often occurs, due to parties "listening in" or leaving their receivers off the hook.

Telephones equipped with one of these condensers wired in series with the receiver overcome this difficulty, and it is possible to ring satisfactorily on a line with several receivers off provided the telephones

> Magneto telephones, for wiring in series

Telephone Equipment

 $\mathbf{1}$  (1) MfQ |  $\mathbf{2}$  \$2.30

Capacity

# TELEPHONE APPARATUS

# Cords

# FOR TELEPHONE SETS

There is a Western Erectric cord to fit any telephone set or switchboard. If none of the cords described below meet your requirements, write us, sending if possible a sample cord (an old one will do) or a sketch, paying particular attention to the kind of tip required.

Always specify length of cord when ordering.

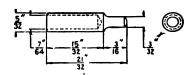
Wall Telephone Receiver Cords

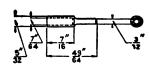
Code			Standard	I	ist Price		
No.	Description	Used with	Length	Cord Tip	Each		
10	Two conductor tinsel	Receiver on		No. 29 (receiver			
	cord, green silk cov- ering.	wall set	3 and 6 ft.	end) No. 62 (set end)	\$0.80 1.30		
92	Two conductor tinsel cord, red and blue twisted covering	Receiver on wall set	2½ ft.	No. 62 (set end) No. 30 (receiver end)	,60		
454	Same as No. 92, except for tips.	Receiver on wall set.	3 ft.	No. 30 (both ends)	.60		
	Deck Stand Cords						

# Desk Stand Cords

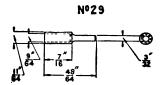
549	Two conductor tinsel cord, green silk covering.	Receiver on No. 1020 desk stand.		No. 62 (stand end) No. 29 (receiver end)	.70
329	Single conductor tin- sel cord, green silk covering.	on No.	9½ ins.	No. 62 (stand end.) No. 56 (transmitter end)	.40
550	Three conductor tin- sel cord, green silk ering.	desk stand	5½ ft. 8 ft.	No. 62 (both ends)	1.80

set

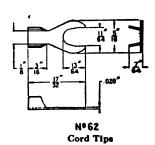




Nº61



Nº 30



# **DESK SET BOXES (Magneto)**

desk

box.

For Use with Desk Stands, Telephone Arms, etc., on Magneto or Local Battery Lines

Used with No. 1020AL desk stand and Nos. 1020AC, 1048AA, AB and AC telephone arm.

# Nos. 300 and 315 Types

Oak boxes equipped with induction coil, and with ringer, generator and condenser as indicated below.

# RINGERS OPERATED BY ALTERNATING CURRENT Code Ringing

Code No.	Ringer Resist- ance Ohms	Type Generator	Con- denser	Service	List Price Each
315H	1000	No. 22 (3 bar A.C.)		Light loaded lines	\$18.40
300K	2500	No. 48 (5 bar A.C.)		Heavy loaded lines	21.10
300N	2500	No. 48 (5 bar A.C.)	1 Mf.	Heavy loaded lines	<b>22</b> .50
300L	1600	No. 48 (5 bar A.C.)		Medium loaded lines	20.80
300M	1600	No. 48 (5 bar A.C.)	1 Mf.	Medium loaded lines	22.20
300AA		No. 50 (3 bar A.C.)	1	Heavy loaded lines	20.00
300AB		No. 50 (3 bar A.C.)	١ .	Medium loaded lines	19.70

# Desk Stands

Code Finish Description No. 1020AL For regular bridging magneto service. Insulated transmitter. Includes 1 No. 20-AL desk stand, 1 No. 329 transmitter, 1 No. 143AW receiver and cords. Black List Price Each \$14\i50zed by

Nos. 300 and 315 Type Desk Set Boxes

# TELEPHONE APPARATUS

# **Extension Bells**

# FOR ALTERNATING CURRENTS

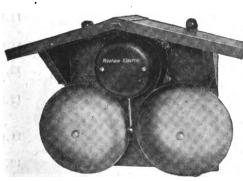
These extension bells are intended for auxiliary use in connection with wall, desk or telephone arm telephones. They consist of a ringer on a suitable mounting and two line terminals or binding posts.



No. 127 Type



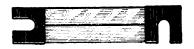
No. 392 Type



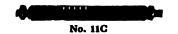
No. 342 Type



Mica Fuse, Western Union Style



Mica Fuse, Postal Style



They are suitable for magneto bridging non-selective service only.

Ringer mounted in an oak box. Approximate dimensions, width  $6\frac{1}{2}$  inches; height  $4\frac{7}{8}$  inches; depth  $4\frac{5}{8}$  inches.

Code	Ringer	Resistance	List Price
No.	No.	Ohms	Each
127E	38AG	1000	\$7.70
127F	38BG	2500	8.50
127G	38FG	1600	8.10

No. 392 type moisture-proofed loud ringing bells having a black finish metal cover and base with galvanized finish gongs.

When the extension bell is to be used on a central battery line a condenser must be connected in series with the ringer coils.

Base is arranged for mounting a No. 21D condenser. Condenser is not furnished, however, unless so ordered. The connecting leads to the ringer coils are so arranged that the condenser can be easily connected in series with the ringer without disturbing the line wires when desired.

Code	Resistance	Diameter	List Price
No.	Ohms	Gongs	Each
392A	1000	6 ins.	<b>\$</b> 13.50
392B	2500	6 ins.	14.30
392E	1600	6 ins.	13.90
392G	1000	<b>8</b> ins.	On request
392H	2500	8 ins.	On request

Biasing attachment for selective ringing can be added if desired.

No. 342 type loud ringing bells for use in mines and other places where a bell protected from weather is desired. Consists of a No. 392 type bell mounted on a No. No. 149A backboard having a sloping roof which protects the bell from falling water and other substances.

occus onto	DOI: 110111 10	man b	a conce back	· • • • • • • • • • • • • • • • • • • •
Code	Bell	Resistance	Diameter	List Price
No.	Used	Ohms	Gongs	Each
342G	392G	1000	8 ins. 0	n request
342H	392H	<b>25</b> 00		n request
342J	392A	1000		n request
342K	392B	2500	6 ins. O	n request

# Mica Fuses

These fuses are furnished either with copper or foil tips, and in either Western Union or Postal style. The fuse is mounted on a mica base, or inclosed between two strips of mica.

When ordering, always specify ampere capacity desired and it is best to send sample of fuse wanted (an old one will do). If this is not possible, be sure and give the following information:

Length.
Style (whether Western Union or Postal).
Kind of terminals or tips (copper or tin foil).
Use (whether for exchange or telephone protection).

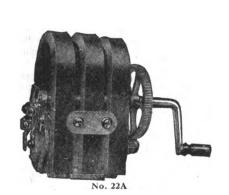
# Tubular Fuses With Fiber Shell

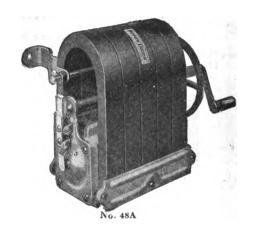
These fuses are regularly furnished in 7 amperes capacity unless otherwise specified, although fuses of from 1 to 8 amperes capacity can be furnished if so ordered. The No. 12 fuse contains a heat coil.

			List Price Each	
Code	Used with	Less	10	20
No.	Protectors Nos.	than 10	to 20	or More
11C	58A, 58B	\$0.60	G80044 10	<b>\$</b> 0.30
12A	12A	Digliized by	.80	.60



# **TELEPHONE APPARATUS**





# Code

No. 50F

No. 1001A



No. 1002AC

# **Hand Generators**

Code No.	No. of Bars	Current	Armature Normally		List Price Each
22A	3	Alternating	Open	Magneto tele phone sets an switchboards	d \$10.40
48A	5	Alternating			12.80
48B	5	Alternating and pulsating	Closed	{ Magneto telephones	14.10
<b>5</b> 0 <b>A</b>	3	Alternating	Closed	{ Magneto telephones	11.60
<b>50</b> C	3	Pulsating	Closed	{ Magneto telephones	12,40
50E	3	Alternating and pulsating	Closed	{ Magneto } telephones	12.80
*50F	Same as	50A, but design			•
	-	S			11.60
*50G		50C, but design		• •	
*50H	•	s 50E, but design			12.40
JUI1		s		• •	12.80

# Hand Sets

Code		List Price
No.	Description	Each
1001A	For use as a lineman's test set on central bat- tery lines. Equipped with No. 244W trans- mitter, No. 131W receiver and 3 ft. No. 348	
	cord which has two spring clips	\$16.50
1002AC	For use in place of a regular magneto bridging or central battery desk stand or transmitter arm. Equipped with No. 141W receiver, No. 267W transmitter, 4½ ft.	
	No. 318 cord	18.80

# Induction Coils

Code Dimensions No. Inches	Used In	List Price Each
13 $1 \times 1\frac{5}{22} \times 3\frac{1}{4}$	All standard bridging magneto tele-	\$1.80

No. 12A Protector



No. 58A Protector



No. 60A Protector



No. 1



No. 2



No. 19



No. 20

# TELEPHONE APPARATUS

# Weatherproof Jacks

# No. 186 Jack—Open with Cast Iron Cover Removed

No. 186. Weatherproof jack designed for mounting poles; affords a means of connecting a portable telephone to the line. Contains protective apparatus.

> List Price Each

Lock will be furnished if specified in order...... \$15.50



# **Protectors**

# FOR TELEPHONES

	N	o. 12 Type	
Code No.	Protection Against	Consists of •	ist Price Each
12A ,	Lightning, crosses with electric cir- cuits and sneak currents.	2 No. 12A 7 ampere fuses with heat coils, 2 carbon blocks and mountings.	<b>\$</b> 3.50
	Ţ	о. 58 Туре	
58A	Lightning and crosses with elec-circuits.	2 No. 11C 7 ampere fuses, 2 carbon blocks and mountings.	\$2.60
58B	Lightning and crosses with electric circuits.	2 No. 11C 7 ampere fuses 2 copper blocks and mountings.	2.90
	/ N	о. 60 Туре	
60A	Lightning.	2 carbon blocks and mountings.	<b>\$</b> 1.20
60B	Lightning.	2 copper blocks and mount-	

# 2 copper blocks and mount-

ings.

NOTE: The No. 12A is recommended in all cases except where the entire telephone system is entirely removed from all other electric lines. In these cases the No. 60 can be used.

# **Protector Blocks**

				Us	ed V	With-		_	List	Price Ea	ch
Cod No.		Protec Block					otecto		Less than 20	20 to 50	50 to 200
1	Plain carbon block with fuse metal.		2	No.	3	Nos.	12A, 60A	58A,	\$0.30	\$0.12	<b>\$</b> 0.08
2	Grooved carbon block without fuse metal.	No.	1	No.	3	Nos.	12A, 60A	58A,	.30	.10	.06
19	Plain copper block with two pins.	No.	20	No.	10	Nos.	58B	60B	.30	.20	.14
20	Grooved copper block with two	No.	19	No.	10					.20	.14
	bushings.					Di	gitized	l by 🕻	900g	le	

# TELEPHONE APPARATUS



Protector Mica



No. 10 Frotector Mica



No. 128W



Nos. 143AW and 144AW

# **Protector Micas**

	U				
Code	Protector		Less	. —List Pr	ice Each-
No.	Blocks	Protectors	than 20	20 to 50	50 to <b>200</b>
3	Nos. 1 and 2	Nos. 12A, 58A and 60A	<b>\$</b> 0.30	<b>\$</b> 0.14	\$0.10
10	Nos. 19, 20 and 21	Nos. 58B and 60B	.30	.18	. 14

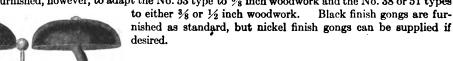
# Receivers

Code No.	Description	List Price Used With Each
*143AW	Concealed binding post hand receiver, composition case.	Telephone sets, desk stands, telephone arms, etc
*144AW	Same as No. 143AW, excepting the case is hard rubber.	Telephones, desk stands, telephone arms, etc
*128W	Standard bipolar head receiver, hard rubber case.	Operator's telephone set, all switch-boards 5.50

<sup>\*</sup>Cord not included; must be ordered separately.

# Ringers

The ringers listed below have gong posts suitable for either  $\frac{1}{2}$  or  $\frac{5}{8}$  inch woodwork, as indicated; spacers can be furnished, however, to adapt the No. 53 type to  $\frac{3}{8}$  inch woodwork and the No. 38 or 51 types





No. 51 Type

	Approx.	_		Mountsin		
	Resist-	——Go	ngs	Wood-		List
Code	ance	Code	Diam.	work		Price
No.	Ohms	No.	Ins.	Ins.	Use	Each
<b>3</b> 8AG	1000	26A	3	<b>5</b> ∕8 )		\$5.70
38BG	2500	26A	3	5/8		6.40
38FG	1600	26A	3	5/8		6.00
51AG	1000	25A	$2\frac{1}{2}$	5/8	Local	5.70
51BG	2500	25A	21/2	5/8 }	battery	6.40
51FG	1600	25A	212	5/8	(magneto)	6.00
53AG	1000	25A	$2\frac{1}{2}$	1/2	telephones	5,70
53BG	2500	25A	21/2	1/2	=	6.40
53FG	1600	25A	<b>21/2</b> Digitized	l by C	ogle	6.00



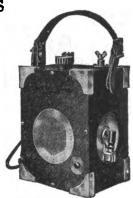
No. 90510 Testing Set

# **TELEPHONE APPARATUS**

# Magneto Test Sets

NO. 1017 TYPE

A wooden box telephone test set equipped with a regular local battery talking circuit consisting of a No. 266W transmitter, No. 13 induction coil, No. 145W receiver and a special three-cell dry battery unit.

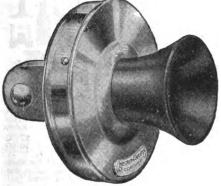


No. 1017B Test Set

# **MAGNETO TESTING SETS**

E.E	ach set consists of	a hand generator and a ringer,	wired in serie	es, and inclosed in	a wooden c	ase.
Code				Size of Case	]	List Price
No.	Will Ring Through			Inches	Finish	Each
90530	10000 ohms	1 No. 22 Type Generator				
		1 No. 18A Ringer		$5\frac{3}{4} \times 6\frac{5}{8} \times 5\frac{1}{4}$	Birch	\$12.40
90510	$35000 \mathrm{~ohms}$	1 No. 22K Generator				
	_	1 Special No. 19 Type Ringer	. <b></b>	5¾ x 6¾ x 5¼	Birch	15.10
90511	50000 ohms	1 No. 22N Generator				
		1 No. 19A Ringer		$5\frac{3}{4} \times 6\frac{5}{8} \times 5\frac{1}{4}$	Birch	16.60
90512	1000000 ohms	1 No. 22N Generator				
		1 No. 19B Ringer	. <b></b>	$5\frac{1}{4} \times 6\frac{1}{8} \times 5\frac{1}{4}$	Birch	18.10
Code			Wgt. Includ	ing Size of Case	J	List Price
No.		Service	Battery	Inches	Finish	Each
1017B	For lightly loade	d lines—it will ring 15 2500 ohm	bells		( Birch	
	over a 15 m	ile No. 12BB iron metallic line.	8 lbs.	437 x 633 x 733	Mahogany	<b>\$</b> 32.80
1017C	For moderately l	oaded lines—it will ring 33 2500	ohm	<b>11</b> 11	) Birch	
	bells over a 15	mile No. 12BB iron metallic lin	e 8 lbs.	433 x 6 5 x 733	( Mahogany	<b>3</b> 6.70
No	OTE: The No. 1017	7C test set differs from the No.	1017B only	in that it is equip	ped with a s	pecially
designe	ed high efficiency	generator. The No. 1017B w	rill, under or	dinary conditions	, be found	entirely
satisfac	ctory, but in case a	a more powerful set is required	to meet unus	ual conditions, the	a No. 1017C	set has
hoon de	arralanad	_				

been developed.



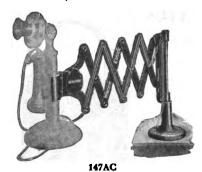
No. 329W



No. 350W

# Transmitters for Telephones

Code			List Price
No.	Description	Use	Each
329W	High resistance, insulated transmitter. Provided with mounting lug and clamping bolt. Nickel-plated case. Similar to No. 311W except provided with clamping bolt.	Magneto and central battery desk stands and telephonearms.	\$5.30
350W	High resistance, insulated, bracket type transmitter. Equipped with two cords. Nickel-plated case with black finished bracket	Magneto and central battery wall tele-	6.30
	and arm.	phones, requiring a bracket type trans- mitter.	·
355W	High resistance, insulated transmitter. Arranged to mount on an iron bracket of the type which forms a part of the No. 350W transmitter. Not provided with mounting lug. Nickel-plated	Magneto and central battery wall type 'telephones.	4.60
	Case.	JILIZEG BY COOKIN	



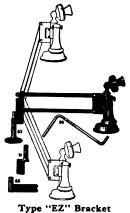
# ADJUSTABLE TELEPHONE BRACKETS Western Electric No. 147 Type Telephone Brackets

Black finished, adjustable folding arm arranged with a clamping device for holding a desk stand telephone.

The desk stand is not included in the price of the bracket and must be

ordered separately.

Code		~Lengt	h, Inches-	Price
No.	Mounts on:	Closed	Extended	Each
147AA	Side of roll top desk	81/4	24	\$13.20
147AB	Wall or side of flat top desk	814	24	13.20
147AC	Top of flat top desk	814	24	13.20
147CA	Side of roll top desk	10	36	18.40
147CB	Wall or side of flat top desk	10	36	18.40
147CC	Top of flat top desk	10	36	18.40



# Western Electric "EZ" Type Telephone Bracket

This telephone bracket is made in one size only with a 24 inch extension, which may be increased to 35 inches by use of a No. 96 attachment. It can be moved up or down and stops in any position. The bracket can be provided with a clamp to fit any standard desk stand. When ordering, specify the kind of stand used: that is, whether with straight cylindrical barrel or with convex shaped barrel. Two standard length brackets can be used on one rear rod or mounting. It is only when the extra length attachments (No. 96) are used that a twin attachment (No. 93) is required. The telephone bracket can be attached to either flat or roll top desks. When ordering, specify the kind of mounting wanted. top desks. wanted.

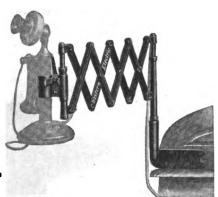


''EZ'' Type Mountings

List Price

Prices request

# Western Electric "S" Type Telephone Bracket



Type "S" Bracket

This telephone bracket revolves on the base and is made in two different lengths, 24 or 36 inches when extended, measuring from the center of the mounting to the transmitter mouthpiece. The stand swivels on the front rod. The bracket can be equipped with mountings for attaching to any style of desk, on wall or other convenient object. Two ing to any style of desk, on wall or other convenient object. Two brackets may be attached to the same mounting by the use of the No. 10 double phone attachment. When ordering, specify length of bracket, style and kind of mounting wanted. The bracket, as well as the mounting, has a black finish.



Type "S" Mountings

W. E.	Length of Bracket	Approximate	*List Price
Type	Extended	Shpg. Weight	Each
S-8	24 ins.	5 lbs.	\$7.00
S-14	36 ins.	6⅓ lbs.	10.00

The above list prices cover the complete equipment for each bracket: One mounting, one receiver hook, one telepone clamp, one set of eyelets for holding cord, but do not include desk stand.

# Mountings

# FOR WESTERN ELECTRIC "S" TYPE TELEPHONE BRACKET

No. 1 is used on side of flat or roll top desk.
No. 2 is used on the top of the desk.
No. 3 clamps on edge of a flat top desk.
No. 4 is used on a wall or partition.
No. 5 is used on side of flat top desk.
No. 6 is used on side of flat top desk.
No. 7 is used on side of flat top desk.
No. 7 is used on side of flat top desk.
No. 10 attachment fits any mounting and holds two arms.
The No. 10 double phone attachment and one mounting furnished in blace of two mountings without extra charge. are furnished in place of two mountings without extra charge.

# Clamps

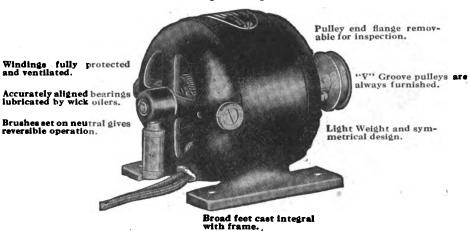
No. 20 clamp fits all phones with a cylindrical barrel. No. 21 clamp fits all phones with a convex shaped barrel.



# TYPE SDA MOTORS

# Series Wound for Alternating and Direct Current

Field frame and commutator end flange are integral.



# Type SDA Motors

# The Little Motors with the Big Reputation

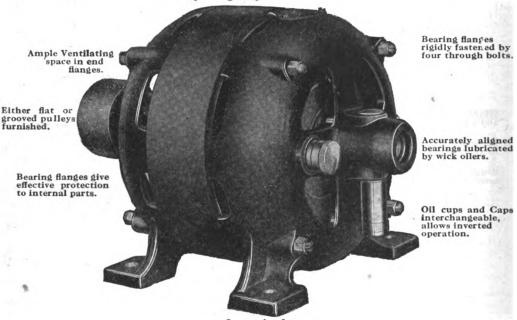
Their light weights and high speeds make them especially serviceable on portable devices such as vacuum cleaners, vibrators and various advertising specialties.

H.P.		▲List Prices Open Motor with Pulley		Approx.	Standard Pulley Dimensions		List	Frame
	Speed R.P.M.	110 Volts	220 Volts	Shipping Weight	Diameter at Belt Center	Adapted to Round Belt Diameter	Allowance for Pulley	No.
	Т	YPE SDA—F	FORM A—SI	ERIES WO	UND—FOR	60 CYCLI	E A.C.	
1/200 1/100 1/70 1/50 1/15	2200 2200 3000 1800 1800	\$18.00 21.00 21.00 45.00 47.00	\$22.50 22.50 27.50 43.00	10 10 10 15 22	5 8 5 8 5 8 114 114	1/8 1/8 1/8 1/8 1/6	\$0.20 .20 .20 .30 .50	300 305 305 315 335
	•	TYPE SI	DA—FORM	D—SERIES	WOUND-	-FOR D.C.		
1/200 1/100 1/70 1/50 1/15	2200 2200 3000 1800 1800	\$19.00 21.00 21.00 26.00 41.00	\$22.50 28.00 43.00	10 10 10 15 22	5/8 5/8 5/8 11/4 11/4		\$0.20 .20 .20 .30 .50	300 305 305 315 335

# Western Electric TYPE SA ALTERNATING CURRENT MOTORS

FOR 60 CYCLE CIRCUITS

Laminae of field frame exposed to air insures low operating temperatures.



Supporting feet cast integral with end flanges.

# Interchangeability Feature

Type SA alternating current motors are absolutely identical with Type SD direct current motors of the same horse power ratings in every dimension—end flanges, distance between holes in the feet, height, length of shafts and every other external feature; moreover the motors are practically identical in performance; therefore, any device equipped with a Type SA motor can be arranged for service on direct current by simply substituting a Type SD motor of the same horse power rating.

- 10	Speed	AList Prices Open Motor with Pulley 60 Cycles		Approx.	Standard Pulley Dimensions		List Allowance	Frame
- Н.Р.	R.P.M.	110 Volts	220 Volts	Shipping Wt.	Diameter at Belt Center	Adapted to Round Belt Diameter	for Pulley	No.
TYPE S	A-150 PE			O PER CEN	T. OVERI	LOAD)—SQ	UIRREL CAC	SE TYPE
1/30	1800	\$32.00	\$34.00	20	11/4	3 16	\$0.50	125
1/15	1800	46.00	48.00	24	11/2	1/4	.60	135
1/10	1800	48.50	50.50	26	11/2	1/4	.60	137
1/8	1800	59.00	61.00	31	13/4	1/4	.60	145
1/6	1800	64.50	66.50	34	2	5 16	.60	147
1/4	1800	70.00	72.00	48	*21/2	*11/4	1.00	155
1/2	1800	107.00	109.00	75	*31/2	*11/2	2.00	165
	TYPE SA	-100 PER	CENT. (FUI	LL LOAD)	START-S	QUIRREL	CAGE TYPE	
1/50	1200	\$32.00	\$34.00	20	11/4	3 16	\$0.50	125
1/20	1200	46.00	48.00	24	13/8	1/4	.60	135
1/15	1200	58.50	50.50	26	13/8	1/4	.60	137
1/10	1200	49.00	61.00	31	17/8	1/4	.60	145
1/8	1200	64.50	66.50	34	-2	5 16	.60	147
1/6	1200	70.00	72.00	48	*21/2	*11/4	1.00	155
1/4	1200	78.00	80.00	48	*21/2	*11/4	1.00	155
1/2	1200	120.00	122.00	75	*41/2	*2	2.00	165

\*Pulleys for frames 155 and 165 have crowned face adapted for flat belt.

†Frames 125 to 155 inclusive have wick-oiled bearings and feet cast integral with end shields. Frame 165 has oil ring bearings and removable foot castings.

Delivery F. O. B. Factory, Ft. Wayne, Ind. For warehouse deliveries write nearest Gouse.

# Western Electric TYPE SA ALTERNATING CURRENT MOTORS For 40 and 25 Cycle Single Phase

	Speed			Approx.	Dimension	rd Pulley	List Retail	†Frame	Fall I	Load
H.P.	Sync. R.P.M.	Volts	Open Motor with Pulley	Shpg. Weight in Lbs.	Diam. At Belt Center	Adapted to Round ' Belt Diam.	Allowance Pulley	No.	Efficiency	Power Factor
40 CYC	LES, 125 I	PER CEI	NT. STAR	T (I.E.,	25 PER (	CENT. OV	ERLOAD	-CONT	INUOUS S	ERVICE
1/15 1/15 1/10 1/10 1/8 1/8 1/6 1/6 1/4 1/4 1/2 1/2	1200 1200 1200 1200 1200 1200 1200 1200	110 220 110 220 110 220 110 220 110 220 110 220	\$53.50 55.50 61.00 63.00 66.50 68.50 71.50 73.50 85.50 87.50 133.00 135.00	26 26 32 32 35 35 38 38 51 51 80	13/8 13/8 13/8 13/8 2 2 2 2 *21/2 *41/2 *41/2	1/4 1/4 1/4 1/4 1/5 1/5 1/5 1/5 1/4 *11/4 *2	\$0.60 .60 .60 .60 .60 .60 .60 .100 1.00 2.00	137 137 145 145 147 147 149 149 157 157 167	33 33 35 35 47 47 53 53 55 55 55	68 68 59 59 79 76 76 81 81 88
	LES, 125 F	ER CEN	T. STAR			CENT. OV			NUOUS S	
1/15 1/15 1/10 1/10 1/8 1/8 1/6 1/6 1/4 1/4 1/2 1/2	1500 1500 1500 1500 1500 1500 1500 1500	110 220 110 220 110 220 110 220 110 220 110 220	\$53.50 55.50 61.00 63.00 66.50 68.50 71.50 73.50 85.50 87.50 133.00 135.00	26 26 32 32 35 35 38 51 51 80 80	13/8 13/8 13/8 13/8 2 2 2 2 *21/2 *41/2	1/4 1/4 1/4 1/4 1/6 1/6 1/6 1/6 1/6 1/6 1/6 1/6 1/6 1/6	\$0.60 .60 .60 .60 .60 .60 .60 .60 .200	137 137 145 145 147 147 149 149 157 157 167	33 33 35 35 47 47 53 53 55 55 55	68 68 59 59 79 76 76 81 81 88 88

\*Pulleys for frames 157 and 167 have crowned face adapted for flat belt. Dimensions given for these

frames are pulley diameter and belt width.

†Frames 137 to 157 inclusive have wick-oiled bearings and feet cast integral with end shields. Frame
167 has oil ring bearings and removable foot castings.

List No. does not include pulley.

# SPECIAL FEATURES Special Shaft Extensions

For Type SA motors, the following plain, straight shaft extensions beyond the standard shaft on the pulley end only may be furnished at an additional charge of \$4.00 list. viz.:

Extensions determined by taking steps of  $\frac{1}{2}$  inch up to and including  $\frac{2}{2}$  inch shaft extension overall and from that point steps of  $\frac{1}{2}$  inch up to and including the maximum permissible extension given in the following table:

Diameter of Standard Shaft in Inches	Length of Standard Extension in Inches	Maximum Permissible Extension in Inches
3/8	11/4	5½
1/2	11/4	6
5/8	11/4	6½
3/4	2	7

# SLIDING SUBBASES

Sliding subbases may be furnished when desired with Type SA motors at the following extra prices:

Frame No.	List No.	List Price
135	99871	\$2.00
137	99872	2.00
145	99873	2.50
147	99874	2.50
155	99875	3.50
157	191676	3.50
165	99870	4.50
167	191677	1 4.50

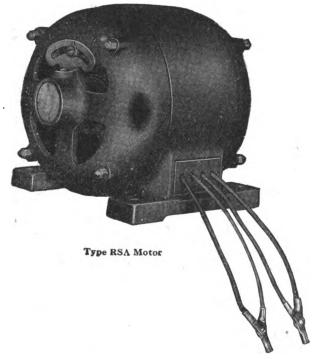
Prices on bases for other frames furnished on application.

All sliding subbases will be furnished with slotted adjusting screws and may be assembled for operation from either right or left-hand side of motor.

Delivery F. O. B. Factory, Ft. Wayne, Ind. For warehouse deliveries write nearest house.

# Western Electric A.C. SMALL POWER MOTORS

·CONSTANT SPEED



# Type RSA Ball Bearing Motor

Form A-60 Cycles-Single Phase GENERAL DATA

The RSA is a constant speed high torque motor. The motor starts as a repulsion motor and at a predetermined speed; a centrifugal device short circuits the commutator, and the motor then runs as an induction motor with induction motor characteristics. The brushes are fixed, that is, they are not lifted from the commutator, but carry current only when the motor is started.

The information given below applies only to standard list motors operating at normal rated voltage and frequency.

Starting Torque. 200 to 300 per cent. of full load torque with full line voltage.

Maximum Running Torque. 200 per cent. of full load torque.

Starting Current. The starting current is approximately three times the full load normal running current.

Heating. 40 degrees all parts based on full load continuously. Above temperature rises are based on a room temperature of 25 degrees C. and will be corrected according to the standards of the A.I.E.E. Maximum momentary overload without injury 50 per cent.

Voltage and Frequency. These motors will operate successfully when the sum of the voltage and

frequency variation does not exceed 10 per cent. above or below normal.

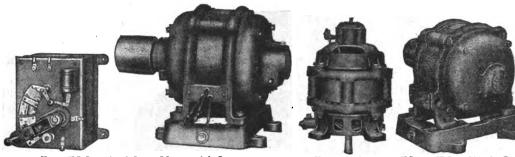
Standard motors may be operated on either 110 or 220 volt circuits by suitably interchanging the external connections of the four leads brought out from the motor frame.

# 110 and 220 Volts

Н.Р.	Full Load Speed	List No. (Does not Include	Shpg. Wt.	List Price Open Motor with	Std. Pulley Diam.	Dimension Belt	s in Inches	Pulley List No.	List Price Allowance
	·	Pulley)		Pulley	Diam.	Width	Dore	No.	Pulley
ሉ	1100	191672	32	<b>\$77.50</b>	2	₹RD.	1/2	191215	\$0.60
⅓8	1700	191561	32	72.50	2	16 RD.	1/2	191215	.60
₹6.	1100	191673	40	87.00	$2\frac{1}{2}$	1	1/2	191678	1.00
<b>1</b> /4	1700	191562	40	82.50	$2\frac{1}{2}$	1 1	1/2	191678	1.00
1/4	1100	191674	55	104.00	31/2	2	<u>5∕8</u>		2.00
1/2	1700	191563	55	99.00	31/2	2	5/A		2.00
<b>⅓</b>	1100	191675	80	121.00	31/2	2	3/4		2.00
3/4	1700	191564	80	1 116.00	31/2	1 2	3/4	vonte.	2.00

Delivery F. O. B. Factory, Ft. Wayne, Ind. For warehouse deliveries write nearest house.

# ALTERNATING CURRENT MOTORS



Type KS Standard Open Motor with Starter

Vertical Type I Open Induction Motor S-4, 2 H.P., 1800, 60 Cycle Totally Enclosed Motor

# Type KS—IS—60 Cycle—Single Phase—Squirrel Cage Type

The Western Electric Type KS single phase squirrel cage induction motor is especially adapted for driving all geared or belted machinery requiring constant speed with a moderate starting torque. This motor is equipped with a clutch type armature, the 15 h. p. 1200 r. p. m. motor having a clutch pulley, so that it does not take the load until full speed is reached. This insures a moderate starting current.

The motor frame is of the riveted type, so that the laminations are exposed, resulting in low operating temperatures. The motor can be mounted on the floor, wall or ceiling, and the bearing brackets are interspanceable.

changeable.

	G1 F_ 11		Volta -	^List Prices			•	Shipping Wt. In Lbs. (Approximate)					
H.P.	Speed Sync. R.P.M.	Full Load Speed	Volts Specify	<b>v</b> .t.	Motor	Motor with Starter	Allowance for Pulley	Motor with Base	Add.		imension In Inches		Frame
			Voltage When Ordering	Motor Only	with Starter	Pulley and Base	`	Pulley and Starter	Belt- Tight- ener	Diam.	Width	Bore	
1 1/2	1200 1200	1140 1140		\$122 114	\$154 154	\$162 162	\$2 2	170 240	35 40	41/2	2 3	1 1	122 140
111/2	1800 1200	1710 1140		138 184	178 224	186 232	2 2	170 300	35 50	41/2	2 4	1 1½	122 160
2 2½	1800 1200	1710 1140	110	148 234	188 282	196 294	2 4	240 435	40 60	41/2 51/2	3 4	1 13/8	140 180
3 3	1800 1200	1720 1140	220	186 260	234 208	242 324	2 4	300 475	50 60	4½ 7	4 41/2	1½ 15/8	160 181
5 5	1800 1200	1720 1150		240 366	288 414	300 428	4 4	435 560	60 70	5½ 7	4 41/2	13/8 15/8	180 201
71 <u>4</u> 71 <u>4</u>	1800 1200	1730 1150		364 490	422 548	436 566	<b>4</b> 6	560 725	70 80	7 8	41/2	15/8 17/8	201 220
10 10	1800 1200	1730 1150	220 220	472 552	542 622	560 640	6 6	725 850	80 80	8	4½ 5	17/8 17/8	220 221
15 15	1800 1200	1740	220 220	538 656	622 740	640 760	6	850 1325	80 	8 8	5 5	17/8 21/4	221 ††11

These prices on 10 and 15 h. p. sizes are for 220 volt starter, for 110 volt starter add \$10.00 to the 220 volt prices.

† These motors must be supplied with some form of resistance reactance starting box. ††This Motor is Type IS.

The above motors are of the clutch armature type except the 15 h.p., 1200 r.p.m. size, which is furnished with clutch pulley.

Prices on back geared, totally enclosed and vertical KS and IS motors quoted on application.

‡ Pulley allowance given for this size is for the solid removable pulley, and not for the clutch with

pulley complete.

Delivery F. O. B. Bloomfield, Boston, Chicago, Cincinnati, Cleveland, Erie, Ft. Wayne, Lynn, Milwaukee, New York, Jersey City, Hoboken, Philadelphia, Pittsburgh, St. Louis or Schenectady. For

# Western Electric ALTERNATING CURRENT MOTORS



# LEADING RI CHARAC-TERISTICS

Power Factor. Full load 96 to 99 per cent. No load 80 per cent.

Overload capacity: 50 per cent. momentarily. Efficiency: High at all loads.

Starting Torque: RI motors will start and accelerate a load having  $2\frac{1}{2}$  times full load torque.

Mechanical Construction. Rigid and compact, easily accessible for cleaning.

Sizes { Constant speed  $\frac{1}{4}$ ,  $\frac{1}{2}$ , 1, 2, 3, 5, 7.5, 10 and 15 H.P. Varying and adjustable speed  $\frac{1}{4}$ ,  $\frac{1}{2}$ , 1, 2, 3 and 5 H.P. Speeds { Constant 1200 or 1800 R.P.M. Varying or adjustable 1800 to 900 or 1200 to 600 R.P.M.

# Type RI Single Phase Motors

110 or 220 Volts-60 Cycles

		Sn	eed			List Pric		Allow	ances			Standard		1
H.P.	Sync. Speed		P.M.	Volts	Motor	Motor with	Motor with Starter		or	Ship. Wt. in Lbs.	Pulley Dimensions In Inches		18	Frame
		No Load	Full Load		Only	Pulley and Base	Pulley and Base	Pul- ley	Base	Com- plete	Diam.	Belt Width	Bore	
14 14 14 14 14 14 14 14 14 14 14 14 14 1	1800	2100	1790	110-220	\$84	\$86		<b>\$</b> 2		80	3½ 3½ 3½ 3½	2	3/4 3/4 3/4	504
14	1200	1400	1180	110-220	112	114		2		85	31/2	2222222	<b>1</b>	526
13	1800	2000	1790	110-220	100	102		2	اننا	85	31/2	2	3/4	526
23	1200	1400	1180	110-220	162	170	• • • •	2	<b>\$</b> 6	140	41/2 31/2	2	1	546
*	1800	2000	1770	110-220	118	120	• • • •	2	ا ۾ ا	100	372	2	.%	530
,%	1200	1360	1175	110-220	178	186	6164	2 2	6	185	41/2	2	1	549
1	1800	2000	1780	110-220	162	190	\$184	Z	6	140	412	2		546
2	1200 1800	1360 1980	1175 1750	110-220	196 214	204 222	218 236	2	6	175	472	2	1	564
	1200	1300	1165	110-220 110-220	266	276	290 290	2 2	6 8	175 215	41/2	2	1	564
2	1800	1900	1720	110-220	266	276	292	2	8	215	473	3	1	570
2	1200	1280	1160	110-220	348	358	374	2	8	300	41/2	3	11/	570 592
2 3 3 5	1800	1900	1720	110-220	348	358	376	2	8	300	41/2	4	1½ 1½	592 592
5	1200	1360	1160	110-220	688	502	520	4	12	445	51/2	4	13/8	614
734	1800	1900	1720	110-220	462	478	504	4	12	415	51/2	4	138	610
736	1200	1340	1150	110-220	678	696	732	4	14	590	7	41/2	15%	630
10	1800	1880	1700	110-220	632	650	700	4	14	585	7	41/2	15%	627
10 10	1200	1320	1150	110-220	816	830	880	6	14	675	8 -	412	1%	638
15	1800	1880	1700	110-220	692	710	760	6	14	610	8	41/2	1%	632
15	1200	1300	1100	110-220	1070	1090	1140	6	14	1120	8	5	1%	674
10	1 1200	1000	1100	110-220	1070	1090	1140	0 1	7.4	11401	9	<u> </u>	1/81	0/4

\*220 volts only. For 110 volts add \$20. †Frames 504, 526 and 531 have slotted feet, no base. Prices on vertical and variable speed motors on application.

\*\*Delivery F. O. B. Bloomfield, Boston, Chicago, Cincinnati, Cleveland, Erie, Ft. Wayne, Lynn, Milwaukee, New York, Jersey City, Hoboken, Philadelphia, Pittsburgh, St. Louis or Schenectady. For warehouse deliveries write nearest house.

# Western Electric

# Constant Speed Induction Motors SMALL SIZE SQUIRREL CAGE TYPE



Type DST ¼ H.P., 1800 R.P.M., 220 Volt Motor with Oil Ring Bearings



Type DST 1/6 H.P. 1800 R.P.M.220 Volt Wick Oiled Motor

# Type DST 3 Phase Motors

60 AND 25 CYCLES

	Speed		‡List	List Price	Sh		imensions nches	List A	llowance	-
H.P.	Speed Sync. R.P.M.	Volts	Nos. DST Three Phase	Open Motor with Pulley and Foot Casting	Shpg. Weight in Lbs. (Approx.)	Diam. At Bottom of Groove	Adapted to Round Belt Diam.	Pulley	†Foot Casting	Frame Symbol
	` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `	•			60 CYCL	ES	·	<u>'                                    </u>		
1/15 1/15 1/8 1/8 1/8 1/8 1/4 1/4 1/4	1200 1200 1800 1800 1200 1200 1800 1800	110 220 110 220 110 220 110 220 110 220 440 550	159533 159534 67001 67002 66979 66980 159535 159536 159537 159538	\$60.00 62.00 60.00 62.00 64.00 66.00 72.00 74.00 78.00 80.00	32 32 32 37 37 37 39 39 39	15/8 15/8 15/8 15/8 13/4 *21/2 *21/2 *21/2 *21/2	144 144 144 144 388 371 111 1112 1112 1112 1112	\$0.60 .60 .60 .60 1.00 2.00 2.00 2.00 2.00	\$0.50 .50 .50 .50 .50 .50 .50 .50 .50	W-25 W-25 W-25 W-25 W-33 W-33 O-33 O-33 O-33
				25	CYCLES					
1/8 1/8 1/4 1/4 1/4	1500 1500 1500 1500 1500 1500	110 220 110 220 110 220	159539 159540 159541 159542	\$72.00 79.00 86.00 88.00 90.00 92.00	32 32 39 39 39	15/8 15/8 *21/2 *21/2 *21/2 *21/2	14/4/24/24/24/24/24/24/24/24/24/24/24/24/	\$0.60 .60 2.00 2.00 2.00 2.00	\$0.50 .50 .50 .50 .50	W-25 W-25 O-33 O-33 O-33

\*Pulley for oil ring bearing motor has crowned face adapted for flat belt.

The foot casting takes the place of feet and if omitted leaves the cylindrical frame of motor without support.

‡List No. does not include pulley and covers only open type motor.

Type DSQ two-phase open type motors will be furnished only to order.

Price 5 per cent. higher than

for corresponding three-phase motors.

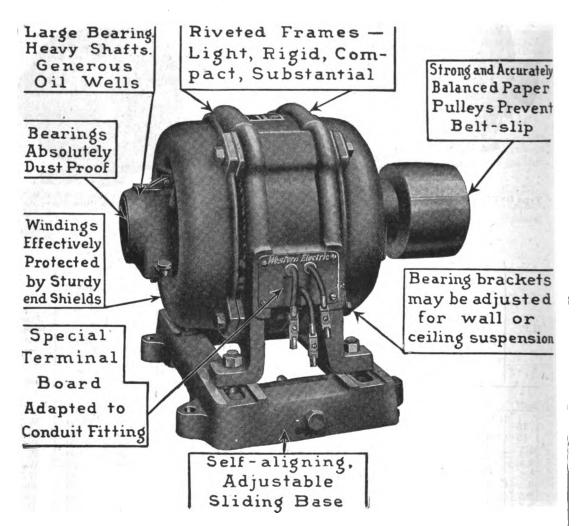
Delivery F. O. B. Factory, Lynn, Mass. For warehouse deliveries write nearest house.

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# SINGLE TWO AND THREE PHASE INDUCTION MOTORS

1/4 TO 5 H.P.

60, 40, 25 Cycles-110, 220, 440 and 550 Volts



# Form K Squirrel Cage Type Induction Motors RIVETED FRAME DESIGN

Construction Details

Frame. Stator laminations of selected sheet steel are securely clamped and riveted under heavy hydraulic pressure between two heavy flanges.

Windings. The stator coils are form wound, and thoroughly insulated. The stator slots in which they are embedded are overhung or partially enclosed, thus offering perfect mechanical protection to the coils.

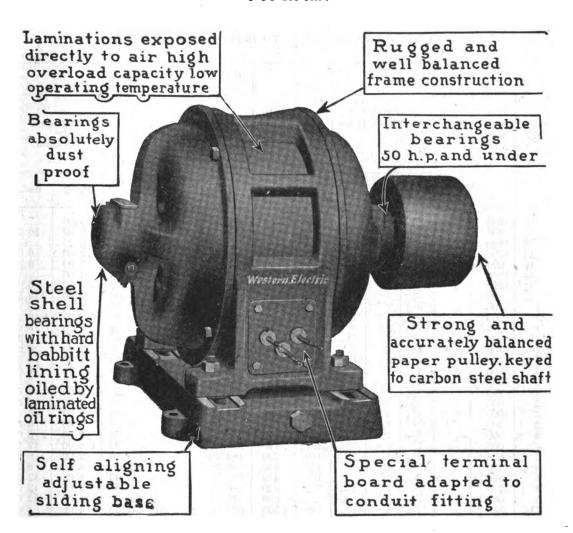
Insulation. The completed stator is dipped in a heavy insulating compound and baked for several hours at a high temperature—resulting in a moisture proof winding.

Rotor. Built up of selected steel laminations, securely clamped between heavy end rings under hydraulic pressure and keyed directly to rotor shaft. Rotor bars are embedded in the core slots and short circuited at their projecting ends.

The rotor of the Type KS motor is similar except that the rotor is mounted on an arguto plug bearing lining which is placed between the steel sleeve upon which the core is assembled, and the shaft.

# TWO AND THREE PHASE INDUCTION MOTORS Types KQ and KT Form B

5 TO 200 H.P.



# Construction Details

Frame. The skeleton frame consists of a single casting of two end rings connected by horizontal ribs. On the inner surface of the ribs the laminated steel core is securely keyed, and is held in place by heavy end flanges.

Windings. The coils are form wound and thoroughly insulated with a moisture-resisting insulating compound. The coils for stators of frames 322 and larger are of the molded type, as these frames have open slots.

Rotor. The rotor is built up of selected steel laminations, carefully annealed, japanned and clamped between, heavy end rings under hydraulic pressure. It is keyed direct to the shaft on the smaller frames and built upon a spider on the larger motors. The rotor winding consists of copper bars imbedded in the rotor and short circuited at their ends by being solidly welded to a copper ring.

Ventilation. The laminations of the core are directly exposed to the air and numerous ventilating ducts are provided in the rotor and stator through which the air is drawn when the motor is in use.

# CONSTANT SPEED INDUCTION MOTORS

# Squirrel Cage Type—60 Cycles

# TYPE KT AND KQ 1/4 H.P. TO 15 H.P.—3 AND 2 PHASI

- 17	01731	i e V								List Prices		ava.	
H.P.	Speed Sync. R.P.M.	Volts		Standard Pulley bimensions in Inches		Frame	Shpg. Weight in Lbs. Approx. (Com- plete)	Motor Only	Motor with Compen- sator	with Compen- mpen-sator Unless		Allowance for Omission	
			Diam.	Belt Width	Bore		-2			Otherwise Specified	Pulley	Base	
1/4 1/4 1/2 1/2 1/2 1/2 3/4 3/4 3/4	1200 ) 900 1800 1200 900 1800 1200 900		31/2 31/2 31/2 31/2 31/2 41/2 31/2 41/2 31/2 41/2 41/2 41/2 41/2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3/4 3/4 3/4 3/4 1 1 1	110 112 110 112 121 121 111 121 122	65 100 65 100 130 75 130 140	\$88.00 108.00 88.00 106.00 126.00 100.00 122.00 138.00	these sizes.	\$90.00 116.00 90.00 114.00 134.00 102.00 130.00 146.00	\$2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00	\$6.00 6.00 6.00 6.00	
1/2	1800 1200 900 600 1800 1200 1200 900	110 220 440 550	31/2 41/2 41/2 41/2 41/2 41/2 41/2 41/2 4	2 2 2 2 2 2 3 4	3/4 1 1 11/8 1 1 1 1 11/8	112 122 140 160 121 140 122 140 160	100 140 180 220 130 180 140 180 220	106.00 132.00 168.00 214.00 122.00 154.00 130.00 154.00 202.00	Compensators not recommended for these sizes If required add \$120.00 list.	114.00 140.00 176.00 222.00 130.00 162.00 138.00 162.00 210.00	2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00	6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0	
	600 1800 1200 900 600		5½ 4½ 4½ 5½ 7	4 3 4 4 4 <sup>1</sup> / <sub>2</sub>	$ \begin{array}{c} 1^{1}_{8} \\ 1 \\ 1^{1}_{8} \\ 1^{3}_{8} \\ 1^{5}_{8} \end{array} $	180 140 160 180 181	340 180 220 340 440 220	264.00 152.00 190.00 250.00 328.00	pensators not recom If required add	272.00 160.00 198.00 262.00 344.00	4.00 2.00 2.00 4.00 4.00	8.0 6.0 6.0 8.0 12.0	
35555555555555555555555555555555555555	1800 1200 900 720 600 1800 1200 900 1200 900 1200 900 1200 900 1200 900 1200 900 720 600 1800 1200 900	en de la serie	41/2 51/2 7 7 8 51/2 7 7 7 8 10 7 7 8 10 10 10 10	4 4 4 4 5 4 4 5 6 4 4 2 5 6 7 4 5 6 9 9	113567388888368888888888888888888888888888	160 180 181 302 312 180 181 302 312 322 181 302 312 322 326 182 312 322 332 332	240 340 540 680 500 750 880 1120 610 880 1120 1520 1520	184.00 236.00 310.00 386.00 442.00 232.00 486.00 374.00 282.00 374.00 416.00 554.00 554.00 555.00 456.00 688.00 728.00	\$352.00 406.00 494.00 462.00 674.00 500.00 542.00 680.00 718.00 484.00 582.00 680.00 814.00	192.00 248.00 326.00 402.00 460.00 364.00 422.00 510.00 580.00 694.00 424.00 516.00 700.00 740.00 500.00 600.00 700.00 840.00 840.00 880.00	2.00 4.00 4.00 4.00 4.00 4.00 6.00 6.00 4.00 6.00 6	6.0 8.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12	

\*Delivery: F. O. B. Bloomfield, Boston, Chicago, Cincinnati, Cleveland, Erie, Ft. Wayne, Lynn-Milwaukee, New York, Jersey City, Hoboken, Philadelphia, Pittsburgh, St. Louis or Schenectady. For warehouse deliveries write nearest house.

†Frames 110 and 111 have slotted feet, no base necessary. Prices are same for horizontal or vertical motors.

# CONSTANT SPEED INDUCTION MOTORS (Continued)

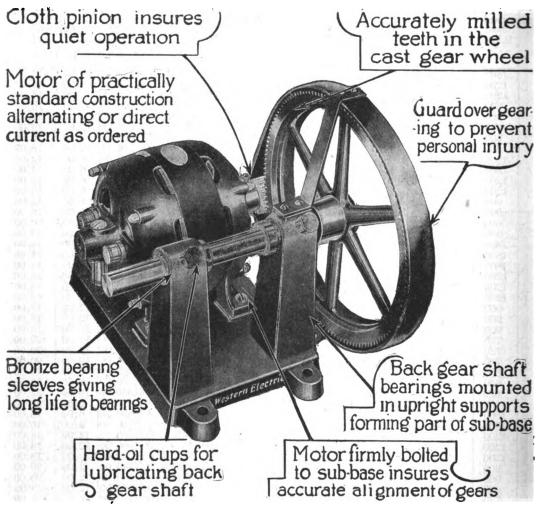
Squirrel Cage Type—60 Cycles TYPES KT AND KQ—20 TO 50 H.P.—3 OR 2 PHASE

	Speed			idard Pu sions in			Shpg. Weight in Lbs.	Materia	Motor	List Prices Motor with	Alloy	vance
H.P.	Sync. R.P.M.	Volts	Diam.	Belt Width	Bore	Frame	(Complete)	Motor	with Compen- sator	Compensator, Pulley and Base	Omi	ssion Base
20	1800	220-440-550		5	17/8	312	970	\$464.00	\$604.00		\$4.00	\$12.00
20	1200	220-440-550	10	6	21/8	322	1200	560.00	700.00	720.00	6.00	14.00
20	1200	2200	10	6	21/6	322	1400	620.00			6.00	14.00
20	900	220-440-550	10	7	21/8	326	1330	638.00			0.00	16.00
30 20	900 720	2200 220-440-550	10 13	7 9	2½ 25/8	326 336	$\frac{1480}{1870}$	770.00	1018.00 910.00		6.00	16.00 18.00
20	600	220-440-550	13	9	25/8	336	1000	850.00		1320.00		18.00
20	600	2200	13	9	25/8	336	2000	574.00				18.00
25	1800	220-440-550	8	5	25/8 17/8	312	1120	680.00		1000.00	6.00	12.00
25	1800	2200	10	6	21/8 21/8 21/8	323	1400	630.00	778.00	800.00	6.00	14.00
25	1200	220-440-550	10	7	21/8	326	1320		1058.00	1080.00	6.00	16.00
25	1200	2200	10 10	7 9	23/8	326	1580	706.00		880.00	6.00	16.00
$\frac{25}{25}$	900	220-440-550 2200	10	9	23/8	332 332	1610 1770	826.00	1114.00	1004.00	8.00 8.00	18.00 18.00
25	600	220-440-550	13	10	$\frac{23/8}{23/4}$	342	2100		1068.00			20.00
25	600	2200	13	10	23/4	342	2260		1328.00			20.00
30	1800	220	10	6	23/4 21/8	323	1360	610.00		840.00		14.00
30	1800	440-550	10	6	21/6	323	1270	610.00				14.00
30	1800	2200	10	6	21/8	323	1370		1040.00		6.00	14.00
30	1200	220	10	9 9	$\frac{23/8}{23/8}$	332	1760	684.00				18.00
30 30	$\frac{1200}{1200}$	440-550 2200	10 10	9	23/8	332	$1670 \\ 1770$		854.00 1114.00		8.00	18.00 18.00
30	900	220	13	9	23/8 25/8 25/8	336	2020		1010.00			18.00
30	900	440-550	13	9	25%	336	1930		970.00			18.00
30	900	2200	13	9	2%	336	2030	870.00	1170.00	1200.00	12.00	18.00
30	720	220	13	10	23/4	342	2380		1088.00		12.00	20.00
30	720	440-550	13	10	234	342	2290		1048.00			20.00
30	720	2200	13	10 12	$\frac{2^{3}4}{3}$	342 346	2390		1328.00			20.00
30 30	600	220 440-550	14 14	12	3	346	2700 2610		$ 1162.00 \\ 1122.00$			22.00 22.00
40	600	2200	14	12	3	346	2610		1502.00			22.00
40	1800	220	10	7	21/6	327	1480		898.00			16.00
40	1800	440-550	10	7 7	21/8	327	1390		858.00			16.00
40	1800	2200	10	7	2½ 25/8	327	1490	818.00	1118.00	1140.00	6.00	16.00
40	1200	220	13	9	25/8	336	2020		1010.00		12.00	18.00
40 40	$\frac{1200}{1200}$	440-550 2200	13 13	9	$2\frac{5}{8}$ $2\frac{5}{8}$	336 336	1930 2030		970.00 $1210.00$			18.00 18.00
40	900	220	13	10	23/4	342	2380		1108.00			20.00
40	900	440-550	13	10	23/4	342	2290	898.00	1068.00	1100.00	12.00	20.00
40	900	2200	13	10	23/4	342	2390	1028.00	1328.00	1360.00	12.00	20.00
40	720	220	14	12	3	346	2700	1032.00	1242.00	1280.00		22.00
10	720	440-550	14	12	3	346	2610	1032.00	1202.00	1240.00	16.00	22.00
50 50	720 1800	2200	14	12	3	346 333	2710 1650		$1502.00 \\ 1040.00$	1540.00	16.00	22.00
50	1800	440-550				333	1560		1000.00		*	*
50	1800	2200				333	1660		1240.00			
50	1200	220	13	9	23/4	343	2390	898.00	1128.00	1160.00	12.00	20.00
50	1200	440-550	13	9	23/4 23/4	343	2300		1088.00		12.00	20.00
50	1200	2200	13	9.	23/4	343	2400		1368.00		12.00	20.00
50	900	220	13	12	3	346	2570		1242.00		16.00	22.00
50	900	440-550 2200	13 13	12 12	3	346	$\frac{2420}{2580}$		$1202.00 \\ 1482.00$		16.00 16.00	$\frac{22.00}{22.00}$
50	720	220	15	14	31/4	*13A	2940		1454.00		24.00	22.00
50	720	440-550	15	14	31/4	*13A	2850		1414.00		24.00	22.00
50	720	2200	15	14	31/4 31/4 31/4 31/4 31/2 31/2	*13A	3000	1338.00	1674.00	1720.00	24.00	22.00
0	600	220	15	14	31/4	*13A	2940		1514.00		24.00	22.00
0	600	440-550	15	14	314	*13A	2850		1494.00		24.00	22.00
00	600	2200	16	16	3/2	*14 *14	3800		1830.00		30.00	40.00
0	514 514	220 440-550	16 16	16 16	$\frac{3\frac{1}{2}}{3\frac{1}{2}}$	*14	$\frac{3745}{3645}$	1520.00	$1750.00 \\ 1710.00$	1780 00	30.00	$\frac{40.00}{40.00}$
ic	514	2200	16	16	31/2	*14	3800	1694 .00	2030.00	2100 00	30.00	40.00
0	450	220	16	16	31/2	*14	3745		1830.00		30.00	40.00
0	450	440-550	16	16	31/2	*14	3655	1600.00	1790.00	1860,00		40.00

\*For delivery see footnote on previous page. \*Note Frames 13A and 14 are types (1 and 12)

# TYPE SA AND TYPE SD

FRACTIONAL H.P. BACK GEARED MOTORS



# Type SA and SD Back Geared Motors

The standard gear ratios are 4 to 1; 5 to 1; 6 to 1; 7 to 1.

The motors are wound for 110 and 220 volts alternating current or for 110 and 220 volts direct current. The alternating current motors can be furnished for either 1800 R.P.M. or 1200 R.P.M.; the direct current motors can be furnished for either 1700 R.P.M. or 1100 R.P.M. The full load speeds of the alternating current motors are approximately the same as those of the direct current motors, 1700 R.P.M. and 1100 R.P.M. respectively.

Motors of 1/8 to 1/2 H.P. can be supplied with back gears.

Back geared Types SD and SA motors can be furnished at an additional price over standard listed motors as follows:

For Motor	Frames	-Addition to List Price of Stan	dord Motor (Less Pulley)-
Туре		Gear	
ŠÀ	Type SD	4:1 or 7:1	5:1 or 6:1
145-147-155	244-246-254	\$38.00	<b>\$42.00</b>
165	264	48.00	<b>5</b> 6.00

Back geared equipment consists of motor with pinion mounted on a cradle attachment consisting of a bedplate carrying countershaft and gear of specified ratio, thus making a complete self-contained unit. Both gear and pinion are covered with a protective guard. Oil or dust-tight gear casing cannot be furnished.

Delivery F. O. B. Factory, Ft. Wayne, Ind. For warehouse deliveries write nearest house.



# ALTERNATING CURRENT MOTORS

VARIABLE SPEED INDUCTION MOTORS





Type BSS Motor with Type CR-6045 Hand Controller

Type BSS ¼ H. P. Single Phase Motor With Foot Controller

Brush Shifting Varying Speed Motors
TYPE BSS—SINGLE PHASE—60 CYCLES—110 OR 220 VOLTS

The single phase brush shifting motor is a variable speed motor, speed variation being obtained by

shifting the brush yoke. As at present built these motors are of two types.

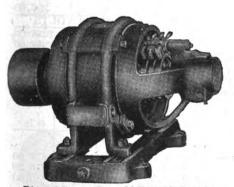
One type furnished with foot controller, ratings from ½ to 1 H. P. inclusive, and the type operated by hand controller from 2 H.P. to 7½ H.P. inclusive.

With the foot controlled motor bolted to any machine, such as a printing press, the operator has the use

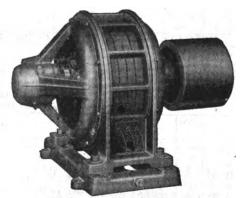
of both hands at all times for feeding the press.

The speed range is approximately from maximum down to ½ or ¼ minimum; the number of speeds obtainable is almost unlimited, therefore the operator can easily run his machine at exactly the proper speed best suited to his work.

There is no current wasted in resistances when varying the speed, so that the power used is nearly in proportion to the speed and is greatly reduced as the speed is reduced. Prices and data on application.



Riveted Frame Form M Variable Speed Induction Motor ½ to 10 H. P. Capacity



M Variable Speed o 10 H. P. Capacity

Two Phase—Slip Ring Type—Induction Motors Three and

The Western Electric slip ring motor is designated as Form M, and is designed for variable speed service or for constant speed service requiring at starting an extremely high torque with a minimum starting current. It is extensively used for crane or hoist service, printing plant installations and individual drive of machine tools, etc.

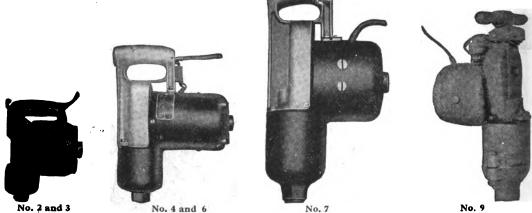
The rotor windings are connected to slip rings, from which leads are taken to the

controller, which may be located to suit the convenience of the operator.

All slip ring motors will start under heavy load and are adaptable to remote control. Provision may be made for short circuiting the slip rings and raising the brushes when the motor has come to full speed, thus eliminating the loss from brush friction during operation. Motors equipped with this feature are known as Form P, and are to be recommended for service where the motors operate continuously at constant speed but require an especially high starting torque.

Slip ring motors are all furnished with both drum and dial type of controllers. CR-6050 Dial Con- The dial type of controller is designed for capacities up to 10 H.P., while the capacity troller of the drum type ranges from 1 to 200 H.P. Prices and data on application.

# Western Electric HAMMERS



# Electric Hammers

These hammers will do the work of pneumatic tools of like capacity at about 15 per cent. of the power cost and without the expense and inconvenience of compressor, air piping hose, etc. Over hand work, the economy is from 80 per cent. to 90 per cent., and it is by no means uncommon for a tool to save its cost in a week. Every tool is controlled by a switch mounted in the handle and equipped with flexible cord and plug. They may be attached to any lamp socket.

A man drilling by hand strikes from 40 to 65 blows per minute.

These hammer from 1000 to 4000.

# D.C. ONLY-110 OR 220 VOLTS

		apacity Concrete nestone					lead door
Type	Diam. of Drill ins.	Drill Speed ins. per Min.	Power Watts	Blows per Min.	Net Wt.	Shpg. Wt.	List Price Each
D-3	1/2	2	150	3000	14	20	\$189.00
D-4	1	2	220	1800	25	35	234.00
D-7	11/2	3	550	1300	50	65	315.00
D-9	-11/2	6	620	1100	75	957	396.00
0	PERATE ON	A.C. OR D.C.	CURRENT-	25, 30 OR 60	CYCLES-	110 OR 220	VOLTS
U-2	1 1/2	2	150	3000	15	21	\$234.00
U-6	1/2	2	240	1800	27	37	288.00

For drilling speed in brick multiply by 2. For drilling speed in granite divide by 2 and use diamond drills. Each tool is complete with cord and plug and runs from a light socket.

STANDARD DRILLS

List Price per Dozen for Drilling Lengths

Туре	Dia. of Drill	5 In.	8 In.	12 In.	Type	Dia. of Drill	8 In.	12 In.	18 In.	24 In.	36 In.	48 In.
D-3 D-4 U-2 U-6 D-4,7 U-6	3/8 7 16 1/2 9 16	The state of the	*\$32.00 *32.00 *33.60 *33.60	*\$33.60 *33.60 *25.52	D-4, 7 { U-6 { D-7 {	$ \begin{array}{c} 3/4 \\ 7/8 \\ 1 \\ 1/4 \\ 1/2 \end{array} $	\$34.40 35.20 36.80 40.00 43.20		\$41.60 43.20 44.80 48.00		*\$62.40 *65.60	*\$72.00

\*Special; not in stock.

	DIAMOND D	RILLS			FLAT	CHISELS		17/26/2006
				Width of		al Shank agth	Round S Leng	
		8 In.	12 In.	Face	8 In.	12 In.	8 In.	12 In.
	1/2 in. or under	\$22.40	\$24.00	$\frac{1}{2}$ in. or under	\$25.60	\$27.20	\$22.40	\$24.00
All	5/8	24.00	25.60	5/8	27.20	28.80	24.00	25.60
All Types	5/8 3/4	28.00	30.40	34	30.40	33.60	28.00	30.40
• •	1	30.40	33.60	1 1 -	33.60	36.80	30.40	33.60
	•		HC	SILIAM DBILLS				

# HOLLOW DRILLS

		110000	" Divided		
	•	List Price			List Price
Diameter	Length	Each	Diameter	Length	Each
1 <del>.7</del>	12	\$7.20	$1\frac{3}{16}$	36	\$13.60
$1\frac{16}{16}$	24	9.60	$1\frac{1}{16}$	48	16.00

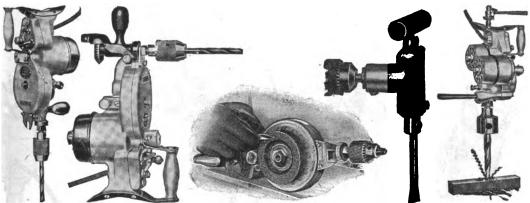
To be used with Type D-7 only.

To be used with water feed a set consists of one of each size.

Delivery F. O. B. Chicago, Ill.

For warehouse deliveries write nearest house.

# Western Electric Electric Drill



Model B Drill Model B Drill Show-Showing General ing Method of Using Construction Breakover Feature

Garage Type

Model C Drill Valve

Grinder Similar in Construc-tion to Model B

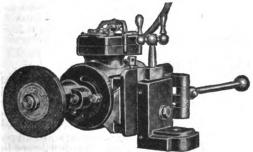
Western Electric Portable Drills

These drills are thoroughly reliable, strongly built, light in weight and convenient in shape. They operate on either alternating or direct current and are reversible. Attachment is made to the ordinary drop cord or incandescent lamp socket.

Model B: Has the breakover feature for changing drills or taps instantly by hand without the use of chuck wrench or key.

Model C: Has two speeds, the gears running in grease. It has the offset spindle, allowing close quarter drilling. Max. Diameter Max. Diameter \*List Price

		MIGN. DIG	THECOL	Man. Dial	TIENET		DIDU 1 1100
List		of Drill for	Drilling	of Tap for T	apping	Shpg.	with Cord
No.	Type	Thick Steel	Wood	Thin Steel	Iron	Wgt.	and Plug
				⅓ in.	🔥 in.	20 lbs.	•
220000	With 3/8 in. chuck.			<del></del>			<b>\$90</b> .00
220002	With Jacobs geared	chuck					94.00
220003	Add for emery whee						3.00
220004	Add for valve grind	er attachment	. <b></b>				12.00
220007	Complete Garage C	utfit (Model	B Drill with Noe	s. 220000, 2200	003 and 220	0004)	105.00
	Model C Drill						
220005	With 1/2 in. chuck fe	or S. S. Drills.					\$130.00
220006	With ratchet feed w						136.00
220008	With No. 2 Morse 7						135.00



Tool Post Grinder



Buffer and Polisher

Western Electric Tool Post Grinder

This tool is not only adapted for grinding centers on lathes, but also for grinding dies, reamers and cutters and for universal grinding as well.

\*List Price List No. with Cord and Plug 220009

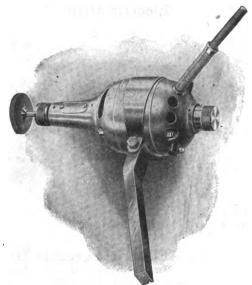
Western Electric Buffer and Polisher

This tool is very useful for buffing and polishing brass, steel and other metals and when equipped with the small emery wheel is well adapted for light grinding also.

# **ELECTRIC PORTABLE GRINDERS AND DRILLS**







Portable Electric Grinder



Model O Electric Drill

# Electric Portable Grinder

The handy tool that grinds dies, reamers, etc. Only the highest grade of materials used in its construction. Complete it weighs only 5 lbs., the outer castings are made throughout of highly polished aluminum. The dustproof bearings are made of highest grade speed nickel babbitt. The armature shaft is ground on centers to a mirror finish assuring extreme accuracy.

The motor is air cooled and proof against excessive heat. This air cool feature has double functions, that of keeping the motor cool, at the same time clean and free from dust. The adjustable end thrust and bearing take up all wear, assuring long life. A special feature is the dustproof bearing caps. Operates from any electric light socket on both direct and alternating current, voltage from 104 to 120 volts.

List		Price
No.		Each
220023	Electric Portable Grinder, ½ H.P	<b>\$33</b> .00
Deliv	ery F. O. B. Racine. Wis. For warehouse deliveries write nearest house	

# Western Electric Portable Electric Drills

Model A Drill. This tool was designed for drilling in either metal or wood. It will run on either alternating or direct current. The offset spindle allows drilling in close corners. The main driving spindle is run in a tobin bronze bushing, two inches in length. The lower handle can be readily removed when necessary.

The body is made of aluminum thoroughly strengthened and supported where the strain is most severe. Arrangements are made for positive and effective oiling for the motor shafts, driving spindle and all parts that are subjected to wear. The gears are accurately machined and run in grease. This drill is very light and convenient to handle. It is especially useful for drilling in sheet metal of all kinds. Also for drilling name plate and oiler holes and for light drilling in wood.

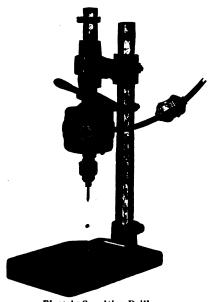
Model O Drill. Specially designed for drilling in cast iron, brass and other soft metals. Also for light drilling in wood.

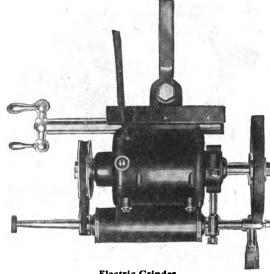
The general construction is similar to Model A drill except in Model O drill the chuck spindle is in the center of the motor body and is directly connected to the motor shaft without gear reduction. The chuck spindle runs in a tobin bronze bushing of ample bearing surface; will operate on either alternating or direct current.

List No.	Model	Std. Voltage	Length Over All	Steel and Other Metals	Center of Chuck to Edge of Motor		*List Price
220016 220017	A O	32,100,110,120,240 or 250 32,100,110,120,240 or 250	14 in.	1/4 in. 1/8 in.	₹ in.	17 lbs. 17 lbs.	\$70.00 50.00

\*Delivery F. O. B. Factory, Leipsic, O. For warehouse deliveries write nearest house.

# **DUMORE ELECTRIC SPECIALTIES**





Riectric Sensitive Drill

Electric Grinder

# Dumore Electric Sensitive Drill

The Dumore electric sensitive drill is especially adapted for the use of jewelers, watchmakers, instrument manufacturers and gold and silver smiths The feed control, which is equipped with a spring balance, is extremely sensitive and the most delicate piece of work can be drilled accurately and rapidly.

Height 18 inches; weight 17 lbs.; stroke 2 inches. Drills to center of a six-inch pipe. Drilling capacity: Steel 0 to  $\frac{1}{42}$  inch; brass, aluminum and soft alloys, 0 to  $\frac{1}{44}$  inch. Equipped with a high speed universal motor which operates on either D.C. or A.C. Speed 8000 R.P.M. Imported S.K.F. ball bearings to eliminate in the structure of the structu inate vibration.

List No. 220024

Dumore electric sensitive drill.....

List Price Each \$80.00

# Dumore Electric Grinder

The Dumore portable electric grinder cuts grinding costs because it is correctly designed and because with it you get the right cutting speed at the wheels. The motor spindle operates at a speed of 10000 R.P.M., and the internal attachment at 30000 R.P.M. The Dumore grinder is dynamically balanced, insuring perfect work; free from chatter marks. The Dumore costs no more than other grinders, but it will do more work in less time than any other similar tool on the market. It is particularly adapted for grinding gauges, dies, reamers, cutters, etc.

Dumore electric grinder .....

\$120.00

# **Dumore Electric Cloth Cutter**

The Dumore electric cloth cutter is a small light weight cutter especially adapted for cutting one, two and three layers and up. The thin circular knife, keen as a razor, revolving at 6000 R.P.M., slips through the cloth at a speed limited only by the operator's ability to follow the lines of his pattern. Clothing manufacturers, custom tailors, dressmakers, and all kind of garment manufacturers, will find the Dumore a wonderful



**Electric Cloth Cutter** 

time saver. Workmen become expert in handling them in a few hours. The Dumore, while moderate in price, (costing less than one-quarter as much as large electric cutters) is a high-grade, practical cutter. An entirely new principle is embodied; the power is transmitted from the motor to the cutting blade by a belt, doing away with the disagreeable, nerve-racking gear noises. The motor is universal—operating on direct or alternating current. The cutter is connected to any convenient electric light socket.

A small emery wheel running at right angles to the cutting blade—leaving it hollow ground—gives it a keen razor edge. When blade becomes dull it can be instantly sharpened.

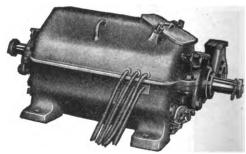
220026 Dumore electric cloth cutter.....

Delivery F. O. B. Factory, Racine, Wis. For warehouse deliveries write nearest house.

# Western Electric | ALTERNATING CURRENT MOTORS



MIS 105 to MIS 109, Form A Open Type Mill Motor



MI 101 to MI 109, Form B Totally Enclosed Mill Motor

Alternating Current Mill Type Motors 25 CYCLES—3 TO 150 H.P.

The Western Electric alternating current mill type motors have proven remarkably successful when applied to the externally severe service conditions which are met with in steel mills, crane and hoist service, etc. The best grade of materials enter into their construction and special care and attention is given to attaining the best mechanical and electrical characteristics, insuring the utmost service reliability, and ability to withstand severe strains and heavy overloads.

Ratings—The totally enclosed mill type motors (MI design) are furnished for mill service, based on sixty-minute operation in capacities ranging from 3 h.p. to 150 h.p. The open mill type motors (MIS design) are furnished for continuous service in sizes ranging from 25 h.p. to 150 h.p. The motors are wound for 220 or 440 volts, 25 cycles, three phase circuits, and will carry their full rated load with a temperature rise not to exceed 75 degrees C. on all parts.

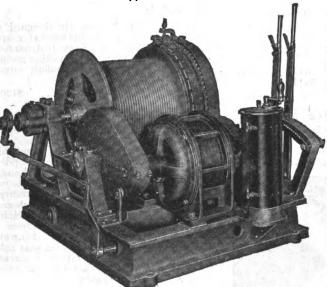
The synchronous speed of the motors up to and including 20 h.p. is 750 r.p.m.; from 25 h.p. to 100 h.p.,

inclusive, 500 r.p.m., and the 150 h.p. motor operates at 375 r.p.m.

The standard motors are designated as Form A, but when furnished with axle brackets for back gear equipment are known as Form B. Back gear pinions and enclosing covers for the gears may be supplied, and solenoid brakes of exceptionally strong construction are built for these motors.

The solenoid brake is furnished with a special brake shoe of special molded asbestos compound. The coils of the brake are wound single phase and may be connected across any single, two or three phase circuit without change. They have a maximum retarding torque of not less than full load torque of the motor, and a holding torque of not less than 125% of full load torque.

Prices and data on application.



Single Drum Hoist

Hoist Equipment

The Western Electric hoists are of the friction drum type and are intended for general hoisting works in docks, ferries, warehouses, factories, quarries and similar places. They are of sturdy construction and can be depended upon for reliable service under the most exacting conditions.

The hoist equipment may be either single friction drum, double friction drum with the drums rotating in the opposite direction, double drum with the pinion between the drum gears and having both drums rotating in the same direction, or double drum with pinion between the drum gears and the boom swinging gear mounted in front.

The motors used with these hoists combine compact and rigid construction with high electrical efficiency. The shaft and bearings are unusually large while the electrical parts are designed to carry heavy overloads with safety.

Alternating current hoists are equipped with variable speed phase wound induction motors, operating on circuits of 220, 440 or 550 volts at 60 cycles.

The controllers have a single operating handle, the speed changes being obtained by means of a resistance external to the motor. This resistance is constructed for severe service and is practically indestructible.

They are supplied in hoisting capacities ranging from 300 lbs. to 6000 lbs., with rope speeds of 100 to

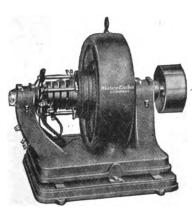
200 feet per minute.

The motors are rated from 1½ h.p. to 52 h.p. Prices and data on application OQ

# Western Electric

# **ALTERNATING CURRENT GENERATORS**

# **Belt Driven Alternators**



Type TAB or QAB Form ML Belt Driven Alternators, Self-excited Revolving Armature Type



ATB 150 KW 900 RPM 2300 Volt 60 Cycle Belt Driven Alternator

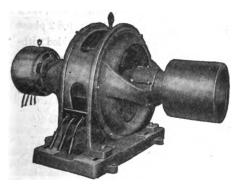
# SELF-EXCITED REVOLVING ARMATURE TYPE TAB AND QAB FORM ML 71/2, 15 AND 25 KW.

The self-excited revolving armature Form ML alternator is especially adapted for installation in isolated plants and small power plants. It is exceptionally compact and simple in construction and operation. The first cost as well as the operation and maintenance expenses are lower than if two separate units were used.

Ratings. The alternators are built in three sizes, 7½, 15 and 25 kw., 120, 240, 480 and 600 volts, 60 cycle two phase or three phase. They may be operated as single phase alternators by employing two of the three phases. Their single phase rating is 70 per cent. of their three phase rating.

# TYPES ATB AND AQB FORM PB 25 TO 200 KW.

The Form PB belt driven alternator is especially adapted for installation in small plants where low power factor is to be encountered. This condition exists on a line where power is supplied to induction motors, transformers or other inductive apparatus.



Type ATB Form PB Belt Driven Alternators
With Direct Connected Exciters

Ratings. These alternators are so designed that they operate at high efficiencies at all loads on power factors of from 80 to 100 per cent. They range in capacity of from 25 kw. to 200 kw., 60 cycles, two or three phase and voltages of 240, 480, 600, 1150 or 2300 volts.

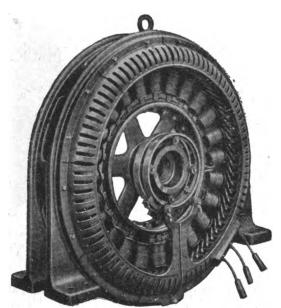
They may be operated as single phase alternators by using two of the phases, and may then be rated at 65 per cent. of the polyphase rating. They may be furnished with or without direct connected exciter.

The Form PB alternators may be used as synchronous motors, synchronous condensers, and for this duty they are equipped with squirrel cage winding in the pole faces, which does not interfere with their use as generators.

Prices and data on application

Power Apparatus

# **ALTERNATORS**



Western Electric Engine Driven Alternator, Skeleton Frame Construction

# Engine Driven Alternators

The Western Electric engine driven alternators are especially adapted for central stations and isolated plants where reliable service and economical operation are essential. They may be directly connected to a steam or gas engine and form a compact generating unit of exceptionally high operating efficiencies, requiring a minimum floor space and operating with practically no noise or vibration. They are furnished in capacities ranging from 30 K.W. to 240 K.W., in the standard engine speeds for 60 cycles, 240, 480, 600 or 2300 volts. 60 cycle generators employ the skeleton frame construction. Larger generators and 25 cycle machines are of the box frame type. Standard 25 cycle sizes are 180 K.W. and 240 K.W.

Standard alternators are wound for either 2 or 3 phase service, but may be operated single phase, the 3 phase delivering 70 per cent. of their rated 3 phase output, the 2 phase 50 per cent. of their rated 2 phase output. When 60 cycle alternators are furnished with direct connected exciters, exciters are provided without base, shaft or bearings, and are mounted outside of the engine company's pillow block on a suitable bracket or other support, the exciter rotor being pressed on an extension of the engine shaft.

Prices and data on application.

# Western Electric ALTERNATING CURRENT GENERATORS



Type ATB and AQB Water Wheel Driven Alternator with Pedestal Bearing Mounted on Sub-Base

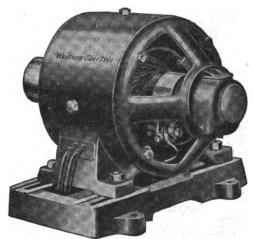
## Water Wheel Driven Alternators

37½ TO 200 KW.

The advance in the development of hydro-electric installations has been due in a large measure to the high operating characteristics which have been attained in the alternators designed especially for this class of service.

The Western Electric water wheel driven alternators combine the highest electrical operating characteristics with a most rugged mechanical construction presenting effective guarantee of uninterrupted service and perfect safety at relatively high speeds. They have proven exceptionally satisfactory during their many years of actual service, and embody in their design and construction the most improved features, resulting in a low cost of operation and a minimum cost of maintenance.

Prices and data on application.



Direct Current Type CVC Exciter

## **Direct Current Exciters**

11/2 TO 20 KW.

All alternators of the revolving field type have their field coils excited by direct current, this current

being led into the coils through slip rings usually mounted on the alternator shaft.

The Western Electric type CVC direct current generator is exceptionally well fitted for furnishing exciting current, due to its ability to operate over a wide range of voltage with no sparking. It responds

quickly to changes in the field current, a feature which is most essential in the operation of alternator exciters.

Rating. The CVC exciters range in capacities from 1½ to 20 kw., and are compounded for 120–
125 volts. They also have a tap on the shunt to weaken the series field so that at 80 volts the characteristic curve will be flat instead of rising, a feature which improves parallel operation. 100016

Prices and data on application.

## Western Electric TRANSFORMER SPECIALTIES

After a complete investigation of the various demands for small electrical capacity, at low voltage, we developed a uniform line of parts for manufacturing miniature air cooled transformers (Type M), ranging from 15 watts capacity to and including 2½ kilowatts.

The broad use of alternating current and the economy and ease with which its pressure may be varied through the medium of the Type M transformer to meet various requirements has made it preferable in all applications not inherently requiring direct current. By substituting this transformer for batteries or magneto generators no maintenance or replacement charges, due to wear, are incurred, less space is required and cleanliness and reliability are assured.

The parts developed are suitable for capacities of 15 to 2500 watts inclusive, 60 cycles, and to 1250 watts inclusive, 25 cycles, at voltages 550 and below. The construction may be for indoor or outdoor service as desired. Type M transformers are sufficiently attractive to permit of their installation in any place where good appearance is desired or necessary.

The following applications are representative of the many to which the Type M transformer may be readily adapted:
Electric welding.

Speed variation of motors.

Operation of small low voltage motors from higher voltage circuits.

Nitrogen filled lamps.



Transformer for Sign Lighting



Special
Three-Phase or Two-Phase Transformer



Special
Transformer for Operating Electric Stop-Motion of Textile Machinery



Special Transformer for Signal Operation



Special
Transformer for Electric Welding

## SIGN LIGHTING TRANSFORMERS TYPE M PRIMARY 110-220 VOLTS; SECONDARY 11-22 V FREQUENCY RANGE 60 TO 140 CYCLES VOLTS

		Core	Copper	Full	Wall			ximate		
Watt	s List	Loss	Loss	Load	Space	Depth		in Lbs.	No. of	List
Cap.	. No.	Watts	Watts	Eff.	in Ins.	in Ins.	Net	Ship.	Base	Price
Cap. 250	76676	9	17	90.5	4% by 8⅓	31/8	15	20	78663	\$25.00
500	76678	17	22	92.7	51/2 by 91/2	414	20	30	78664	32.00
750	146138	24	. 25	93.8	5⅓ by 9⅓	41/4	25	40	146140	39.00
1000	76680	29	29	94.5	61/2 by 11	4 7/8	35	50	78665	46.00
1500	146139	40	33	95.3	61/2 by 11%/	4 7/8	40	55	146141	57.00
2000	76683	55	36	95.4	7% by 12%	5%	· 60	80	78666	70.00
	The shove elec	trical data	annlies to	listed sign	lighting transformers:	data hein	o hased o	n 60 evela	sine way	110 00

220 volts.

The above weights and prices do not include slate bases. The bases will be supplied at an additional net charge of 50

The above weights and prices do not include state bases. The bases while do supplied at an additional new considerable cents each.

Note: When placing requisition for slate base which is to be used for mounting a transformer already in service, the serial number of the transformer should be given so that the proper base may be supplied. This is necessary by reason of slight changes which have been made from time to time in the dimensions of the transformer cases. The shipping weight of the base is approximately 15 pounds.

Four c.p. 5 watt Maxda lamps having a range of volts from 10 to 12, have been found best adapted for sign lighting and the transformers have been designed to take care of this range of secondary voltages. They are rated for 60 cycle operation but will operate successfully on circuits from 60 to 140 cycles. They are designed with series multiple primary rating of 110-220 volts or 200 to 240 volts, having a range of transformation at full load of 10:1 or 20:1 depending upon the connection.

Due to the fact that the transformers are designed for use on a wide range of primary voltages they will operate successfully on practically all sign lighting circuits, and lamps can be ordered to meet exact conditions.

These transformers are designed for either 2,or 3 wire service on the secondary and can be readily connected to all signs without changing their existing wiring.

AUTO TRANSFORMERS

List			Approx. Ship.		Approximate D	imensions in l	Inches	List
No.	Type	†Kv-a.	Wgt. in Lbs.	Depth	Wall Space	Height	Floor Space	Price
7988 <b>3</b>	M	1	30	41/4	8% by 51%	• • • • • • • • • •		\$34.00
79884	M	1.5	35	4 7/8	1014 by 614			44.00
79885	M	2	40	4 1/8	10% by 61/2	• • • • • • • • •		54.00
7988 <b>6</b>	M	3	50	4 1/8	12 by 612	• • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	69.00
79887	M	4	75	5%	121/2 by 75/8	• • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	83.00
79888	M	2	80	5%	13 by 198	• • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	97.00
189909	#	10.5	120	75%	9% by 14	• • • • • • • • • • • • • • • • • • • •	•••••	102.00 163.00
798910	₽ -	10	470	178	978 UY 1078	28	191/ h., 191/	213.00
18981						1. 20	10% Uy 10%	410.00

1874 by 1874 213.00

†Ky-a. output at 110 volts 2 wire or allowable unbalancing at 110-220 volts 3 wire.

Type M is air cooled. Type H is oil cooled. Shipping weight includes oil for the Type H units. All the above listed sizes of transformers are suitable for outdoor installation. Hanging hooks will be furnished with the Type H sizes.

The above auto transformers are designed for single phase, two phase or open delta transformation. These auto transformers are not designed to transform power three phase to three phase from 220 volts to 110 volts, nor can they be used to transform three to two phase power as special taps must be provided to obtain proper voltage ratio.

#### SPECIAL TRANSFORMERS

Prices and information, therefore involving auto transformers for three-phase transformation, or for three-phase to two-phase transformation, or for special electric welding, signal, etc., operation, sent on application.

Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house.

# Western Electric

## **TRANSFORMERS**







Transformer Without Case

View Showing Connection Block

## Type H Transformers

In the Western Electric Type "H" transformers are incorporated many refinements of design that are the result of extended investigation under actual operating conditions and an exhaustive analysis of the most successful modern types.

Notable among the many excellent features are the means adopted to secure cool operation, the convenience and security of the terminal connections, the care taken to insure ease in handling and the perfected methods which attain the ultimate degree of insulation. Both core and copper losses have been reduced to a minimum, the symmetrical core structure insuring a balanced magnetic condition and maintaining uniform effective radiation of heat.

Single-Phase Transformers for Outdoor Installation-50 to 140 Cycles, for Power and Lighting Service-Pole Type, Excepting Ratings 125, 150 and 200 Kv-a

Cape	city	Туре Е	I Transform	ers (List	Prices Inclu Below, and	ide Oil, B I Fuse Bo	oxing, E	Ianging lept as No	Hooks for A	All Sises 1	00 Kv-a	and
Kv-a.	50 Watt Lamps	440 to 1 550 to 1 2200 to 1 2200 to 2 2200 to 2 2200 to 2 2300 to 1 2300 to 2 2400 to 2	110-220 { 10 110-220 { In 110-220 { In 122-244 220-440 244-488 575 115-230 230-460 120-240	p to O Kv-a c. only	_	Primary V 3300 seondary 122–2	Voltage		2200 2200 2300 2400	mary 0-4400 0-4400 0-4600 0-4800 HOUT F	110- 122- 115- 120-	-244 -230 -240
		List Price	Approx. Shpg. Wt in Lbs. Tran. Oil	Quarts of Oil Re- quired	List Price	App Shpg. in I Tran.	Wt.	Quarts of Oil Re- quired	List Price	Appr Shpg in L Tran.	. Wt.	Quarts of Oil Re- quired
2 3 5 7 10 15 25 87 50 75 100 125 180 200	20 40 60 100 150 200 800 750 1000 2000 2500 2500 4000	\$57.00 80.94 100.32 143.36 184.68 224.58 298.68 433.20 580.C4 713.64 893.76 1073.88 1216.38 1358.88	165 2 210 8 295 4 395 7	6 40 5 68 6 121 0 177 5 233 5 220 0 240 0 400 0 440	\$62.70 87.78 109.44 150.48 196.08 233.70 306.66 446.88 598.50 725.04 908.58 1084.14 1244.88 1390.80	150 200 240 295 395 475 710 950 1285 1530 2085 2335 2200 2400 3250	25 25 35 45 70 90 155 270 400 525 495 540 900 1750	10 14 16 21 32 40 68 121 177 233 220 240 400 440 780	\$80.94 106.02 127.68 167.58 214.32 256.50 330.60 475.38 630.42 766.08 961.02 1140.00 1129.62 1409.30	150 200 240 295 395 475 710 950 1285 1530 2085 2335 2200 2400 3250	25 35 40 45 70 90 155 270 400 525 495 540 990 1750	10 14 16 21 32 40 68 121 177 233 220 240 4400 4400 780

Fuse Boxes. List prices for sizes 1 to 15 kv-a inclusive, of 440 and 550 volt primary, and 1 to 50 kv-a of other transformers, include two primary fuse boxes, Cat. No. 104227. List prices for sizes 25 to 50 kv-a inclusive, of 440 and 550 volt primary, include two primary fuse boxes, Cat. No. 159327.

The secondary of sizes 1 to 100 kv-a can be arranged for series, multiple or three-wire service by connection of the secondary leads outside of the transformer tank.

The secondary of sizes 125 to 200 kv-a inclusive is arranged for series and three-wire service. The 575 volt secondary line has been standardized for 550 volt motor service. Delivery F. O. B. Pittsfield, Mass. For warehouse deliveries write nearest house.

# Western Electric

### **Transformers**

## Types A and H Transformers

#### FOR 60 CYCLE CIRCUITS—OUTDOOR INSTALLATION

#### POLE TYPE EXCEPT 75 AND 100 KV-A TYPE A AND 125, 150 AND 200 KV-A TYPE H

Caj	pacity	(List P and on Primary	rices Include the 1 to 50 y Fuse Boxes and Hangin imary Voltage condary Voltage	Oil and Be Kv-a. Sizes Cat. No. *1 g Hooks) e 1100-2200	oxing 3 Two 104227	(L Ii Fu	ist Prices an actude Oil a se Boxes No 6600 to 1	nd Hooks) ot Included 10-220 ), 6600 to 575	
Kv-a.	50 Watt	List	Ship. Wt	. in Lbs.	Qts.	List	Qts.	Ship. Wt.	in Lbs.
	Lamps	Prices	Trans.	Oil	Oil	Prices	Oil	Trans.	Oil
1	20	\$49.02	100	10	4	\$124.84			·
$\frac{11}{2}$	30	69.54	1:50		6		16	235	35
2 3 5	40 60	88.92	150 190	14 17	8	153.90	16	250	35
5	100	119.70	275	26	12	194.94	32	365	70
$\frac{3}{7}\frac{1}{2}$	150	159.60	315	30	14	242.82	40	435	90
10 2	200	194.94	450	44	21	288.42	68	645	155
15	300	259.92	480	51	24	377.08	88	770	200
25	500	373.92	700	85	40	516.42	136	1020	305
371/2	750	494.76	1600	400	184	678.30	229	1540	515
50	1000	606.48	1650	450	208	820.80	156	1250	350
75	1500	803.70	1725	675	308	1010.04	228	1980	510
100	2000	994.08	2200	750	340	1171.92	360	2500	820
125	2500					1330.06	680	3000	1530
150	3000					1482.00	760	3400	1710
200	4000				• • • •	1744.20	860	3600	1950

Transformers wound for more than one primary voltage are equipped with porcelain connection boards for adapting the primary to either circuit.

#### \$6600 Volt Transformers

The stock ratings of the 6600 volt transformers are as follows:

Primary 6600/6300/6000/5700 volts

Secondary: 1½ to 3 kv-a inclusive—110/220 volts

5 to 50 kv-a inclusive—110/220 or 220/440 volts

75 to 200 kv-a inclusive—220/440 volts

For secondary voltages over 1000 increase prices 1 to 25 kv-a inclusive 10 per cent; 30 to 100 kv-a inclusive, 5 per cent.

When Fuse Boxes are desired, two Cat. No. 155757 should be ordered separately for sizes 1 to 75 kv-a, or two Cat. No. 106918 for sizes 100 to 200 kv-a inclusive.

Delivery F. O. B. Ft. Wayne, Ind., for Type A, and Pittsfield, Mass., for Type H. For warehouse deliveries write nearest house.

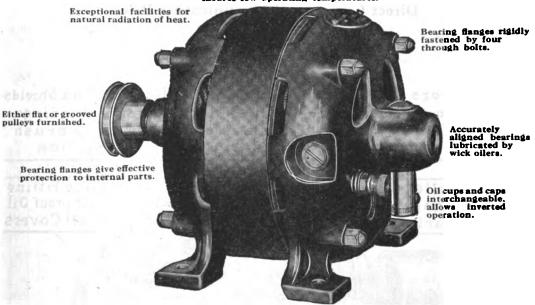
<sup>\*</sup>Sizes 37½ and 50, when operated on 1100 volts, take Cat. No. 106918.

13

## Western Electric TYPE SD DIRECT CURRENT MOTORS

## Shunt Series or Compound Wound

Laminae of field frames exposed to air insures low operating temperatures.



Supporting feet cast integral with end flanges.

## Type SD Shunt Wound

1/50 to 1/2 H. P.—Continuous Service

		List P Open Motor		Shipping		andard Pulley ensions in Incl		List	
<b>H.</b> P.	Rated Speed R.P.M.	110 Volt	220 Volt	Weight in Lbs. (Approx.)	Diameter At Belt Center	Adapted to Round Belt Diameter	Bore	Retail Allowance Pulley	††Frame No.
1/59	1100	\$30.00	\$32.00	${22}$	11/4	14	3/8	\$0.50	224
1/30	1700	30.00	32.00	22	11/4	16 16 16 14 14 14 14 14 16 2 16 2 16 2 1	3,8	. 50	224
1/30	1100	32.00	34.00	22	1 1/4 1 3/8	3	3/8	.50	226
1/20	1100	34.50	36.50	25	13/8	1/4	1/2	.60	234
1/15	1700	32.00	34.00	23	13/8	1 1/4 1	1/2	.60	234
1/10	1700	35.00	37.00	25	13/8	1 1/4	1/2	.60	236
1/8	1700	40.00	42.00	28	17/8	1/4	1/2	.60	244
1/8	1100	45.00	47.50	31	2	3 16	1/2	.60	246
1/6 1/6	1700	45.50	47.50	31	2	16	1/2	.60	246
1/6	1100	45.50	47.50	31	f 2	16	1/2	.60	246
1/4	1700	60.00	62.00	42	*21/2	*11/4	5⁄8	1.00	254
1/4	1100	64.50	66.50	42	*21/2	1 *11/4	5⁄8	1.00	254
†1/3	1700	66.50	68.50	42	*21/2	*11/4	5/8	1.00	254
<b>†</b> 1/3	1100	71.00	73.00	46	*21/2	*11/4	3,3,8,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,	1.00	256
†1/2	1700	120.00	122.00	70	*31/2	1 *11/2	3⁄4	2.00	264
†1/2	1100	131.00	133.00	70	*41/2	*2	3⁄4	2.00	264

\*Pulleys for frames 254 and larger have crowned face adapted for flat belt. Dimensions given for these frames are pulley diameter and belt width.

†Includes starting rheostat with low-voltage release (CR-1000). If omitted \$8.00 list allowance may be made. Smaller sizes do not require rheostat.

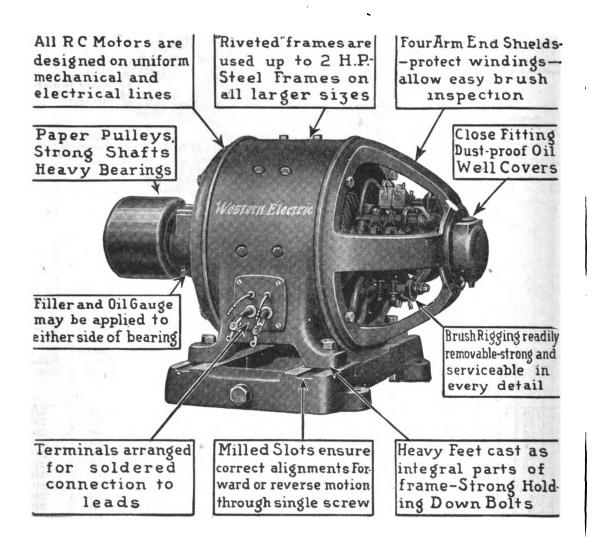
††Frames 224 to 256 inclusive have wick-oiled bearings and feet cast integral with end shields. Frame

264 has oil ring bearings and removable foot casting.
Other sizes may be furnished compound wound at no extra charge.

Delivery F. O. B. Factory, Ft. Wayne, Ind. For warehouse deliveries write nearest house.

## TYPE RC MOTORS

## Direct Current—Communicating Poles



## Type RC Motors

These Western Electric Type RC direct current motors are designed to meet the most exacting conditions. They are furnished from ½ to 75 horsepower and for 115, 230 and 550 yell circuits, with either shunt, series or compound windings.

## DIRECT CURRENT CONSTANT SPEED MOTORS Type RC-Continuous Duty-Shunt or Compound Wound

115 VOLTS 1/6 TO 50 H.P.

Cont	inuous ting	L Shi	ist Price	es und		Ship. Wt.			Standard Pulley		-	List 1	Prices		
404	un <b>s</b>				Addi- tions	in Lbs. (Approx.) Motor	RC	Dime	ensions in	n Ins.	Allow	ances	Addi	tions	Max. Speed
н.р.	Rated Speed R.P.M.	Motor Only	Motor with Rheo.	Motor with Rheo. Pulley and Base	for Comp. Wind- ings	with Rheo. Pulley and Base	Frame No.	Diam.	Belt Width	Bore	Omis Pulley		Ext. Shaft	Con- duit Ter- minal Box	with Weak- ened Shunt Field
**************************************	1800 1150 850 1700 1150 1750 1750 1855 1700 1150 1855 1700 1150 1855 1700 1150 1825 1700 1150 1825 1700 1150 1825 1700 1150 1825 1700 1150 1825 1700 1150 1825 1700 1150 1700 1150 1700 1150 1825 1700 1150 1700 1150 1700 1825 1700 1150 1700 1700 1700 1700 1700 170	\$94 102 102 108 90 116 122 152 164 128 152 230 116 140 294 230 294 556 220 280 356 220 280 356 630 472 524 630 472 524 630 472 524 630 472 524 630 630 776 450 1076 1366 740 1280 1280 1280 1280 1218 1664 1020 1310 1990 1312 1599	\$102 110 110 110 120 124 124 130 160 112 138 124 148 1306 242 232 232 232 2438 540 646 488 546 546 546 547 548 548 548 548 548 548 548 548 548 548	\$110 118 118 124 132 138 168 120 144 168 132 136 248 248 248 230 2316 384 242 302 388 504 558 666 504 548 306 372 676 766 766 766 766 767 760 1400 1760 800 1760 8100 1760	\$2 22 22 22 24 46 66 66 86 66 86 66 88 66 88 66 88 12 14 82 18 18 18 18 18 18 18 18 18 18 18 18 18	100 100 120 120 120 120 120 130 170 120 130 170 120 130 170 265 130 170 265 265 390 525 265 390 525 575 700 390 525 575 700 1050 1170 650 770 1650 1170 650 770 1850 11720 11730	1 11 12 12 12 12 13 14 15 16 16 17 18 19 10 11 11 11 11 11 11 11 11 11 11 11 11	3334344435578574558	22222222222222222222222222222222222222	1 111111111111111111111111111111111111	\$2222222222222222222222222222222222222	\$6666666668886888888888888888888888888	\$22222222222224244444466666664466664666666	\$2222222222222222222222222222222222222	1000 1440 1060 1060 1080 2125 1440 940 1000 690 2125 1435 1000 1100 1435 1000 690 2125 1435 1000 690 2125 1435 1000 1030 625 2125 1435 1080 680 1030 691 1150 1150 1150 1150 1150 1150 1150 11

Series wound motors are not recommended for belted operation.

TWhen compound wound speed approximately 5 per cent. higher.
These motors have special windings.
Delivery: F. O. B. Bloomfield, Boston, Chicago, Cincinnati, Cleveland, Erie, Ft. Wayne, Lynn, Milwaukee, New York, Jersey City, Hoboken, Philadelphia, Pittsburgh, St. Louis or Schenectady. For warehouse deliveries write nearest house.

# DIRECT CURRENT CONSTANT SPEED MOTORS Type RC Continuous Duty Shunt or Compound Wound

230 VOLTS 1/6 TO 50 H.P.

		Shu	st Price	ind	*Addi-	Ship. Wt.						List !	Prices	Al	1
	inuous	- 1	-	Motor	tions	(Approx.)	D.C.		ndard Pu		Allow	ances	Addi	tions	S
Ita	orne.	Motor	Motor	with Rheo.	for Comp.	Motor with	RC Frame	Lime	sivile III	- Helies	fo	г		Con-	w
p	Rated	Only	with Rheo.	Pulley	Wind- ings	Rheo. Pulley	No.		Belt	-	Omis	sions	F-4	Ter- minal	€
Р.	Speed R.P.M.	3	Rueo.	Base	ings	and Base		Diam.	Width	Bore	Pulley	Base	Ext. Shaft	Box	Sh
1/6	†700	\$94. 102.	\$102. 110.	\$110. 118.	\$2	100	1	31/2	2	34 84	\$2	\$6	\$2	\$2	Π.
4	1150 850	102.	110.	118.	2 2	100 120	1 2	416	2 2	1 24	2 2	6	2 2	2 2	1
A SA	†600	108.	116.	124.	2	120	2 3	412	2	1	2	6	2	2	
8	†750 †425	120. 152.	128. 160.	136. 168.	2 4	130 170	3 4	41/2	2 2	1	2 2	6	2 2	2 2	100
2	1700	90.	98.	106.	2 2	100	1	31/2	2.	34	2	6	2	2	2
2	1150 850	116. 128.	124. 136.	132. 144.	2	120 130	2 3	31/2 31/2 41/2 41/2 41/2 41/2 41/2 41/2	2 2	1	2 2	6	2 2	2 2	1
4	1700	104.	112.	120.	2 2	120	2 3	412	2	1	2	6	2	2	2
4	1150 850	128. 160.	136. 168.	144. 176.	4	130 170	3 4	41/2	2 2	1	2 2	6	2 2	2	1
1	†750	152. 230.	160. 238.	168. 248.	4	170	4	41/2	2	1	2	6	2	2	13
4	†500 1700	116.	124.	132.	6 2	265 130	5 3	41/2	3 2	1 1	2 2	8	4 2	2 2 2 2 2 2 2	1 2
	1150	140. 250.	148. 258.	156. 268.	4	170	4	41/2	2 3	1	2	6	2	2	1
	850 †500	294.	302.	312.	6	265 390	5 6	4 4 4 4 4 4 4 4 4 4 4 4 4 5 5 4 5 5 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7	4	1 11/8	2 2	8	4	2 2	1
4	†700 †675	230. 294.	242. 306.	252. 316.	6	265 390	5 6	41/2	3 4	1 11/8	2	8	4	2 2	
4	1700	150.	162.	170.	4	170	4 5	41/2	2	1 28	2 2	6	2	2	1 5
	1150 850	220. 310.	232. 322.	242. 332.	6	265 390	5 6	41/2	3 4	1 11/8	2	8	4	2 2 2	1
	†500	356.	368.	384.	8	525	7 5	51/2	4	13/8	2 4	12	4	3 2	100
	1700 1150	220. 280.	232. 292.	242. 302.	6	265 390	5 6	41/2	3 4	1 11/8	2 2	8	4	2 2	1
	850	380.	392.	408.	8	525	7 7	51/2	4	13%	4	12	4	3	1
	†725 †475	356. 472.	368. 484.	384. 500.	8	525 565	8	51/2	5	138	4 4	12 12	6	3 3	
	†350	524.	536.	554.	14	690	9	7	41/2	1 154	4	14	6	3	
4	†725 †325	472. 630.	488. 646.	504. 665.	12	565 860	10	51/2	5	13/8 17/8	6	12 14	6	3 3	11
-	†500	524. 280.	540. 296.	558. 304.	14	690 390	9	8 7	41/2	156	4	14	6	3	
	1700	340.	356.	372.	6 8	525	6 7	516	4	11/8	2 4	8 12	4	3	1
	850	500. 630.	516. 648.	532. 668.	12 16	565 860	8	51/2	4 5 5	13/8	6	12 14	6	3 3	13
	†475 †375	776.	794.	814.	20	1100	11	8	6	21/6	6	14	6		
3	1700 1150	340. 450.	358. 468.	374. 484.	12	525 565	7 8	51/2	5	13/8	4 4	12 12	6	3 3 3	1
あるるるるる	850	500.	518.	536.	14	690	9	7	41/2	15/9	4	14	6	3	1 3
2	425 †500	1056. 776.	1074. 812.	1098. 832.	26 20	1650 1160	12 11	10	9	23/8	8 6	16 14	6	3	113
	1700	450.	486.	502.	12	650	8	51/2	5	13/8	4	12	6	3	1
	1150 850	500. 600.	536. 636.	554. 656.	14	770 930	10	8	4½ 5	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6	14 14	6	3	
	400	1234. 1076.	1270. 1118.	1300. 1142.	30 26	1925 1720	13	13	9	25%	14	16	6	3	15
13	575 375	1366.	1408.	1442	30	2300	12 14	10 13	10	23/8 23/4 17/8	8 14	16 20	1 ::	3	1
ā	1150 800	600. 740.	642. 782.	662. 802.	16 20	930 1160	10 11	8	5 6	178	6	14 14	6 6	3 3	13
	550	1280.	1324.	1354.	30	1925	13	13	9	25/8	14	16		4	1
	375 1150	1666. 740.	1710. 784.	1754. 804.	36 20	2870 1160	15 11	14 10	12	3 21/8	20	24 14	6	3	
	800	1020.	1064.	1088.	24	1730	12	10	9	932	8	16	8	4	
	525 325	1376. 2016.	1420. 2060.	1454 . 2114 .	30 48	2320 3700	14 16	13 15	10	234 314	14 22	20 32		4	1
	775	1218.	1272.	1202.	24	1940	13	13	9	25/8	14	16	8	4	1
	500 325	1664.	1718.	1762.	36	2890	15 17	14	12	1999	20	24	::	4	1
	1100	1020.	1078.	1102.	24	1800	12	10	9	23/8	8	16	8	4	1
	750 475	1310. 1990.	1368. 2048.	1402. 2088.	30 48	2380 3760	14 16	13 15	10 12	234 314	14 22	20 32	10	4	1
	300						18	i3	9					0.0	
	1075 700	1312. 1598.	1378. 1664.	1408. 1708.	30 36	2020 2970	13 15	13	12	25/8	14 20	16 24	10	4	
	450						17							wei	1
	300 1050	1434.	1508.	1542.	36	2400	19 14	13	10	234	14	20	iò	4	13
	650 425	1914.	1988.	2042.	42	3780	16 18	15	12	31/4	22	32	12	4	

<sup>\*</sup>Additions for compound windings will apply for series wound motors having same speed and output as the standard ratings. Series wound motors are not recommended for belted operation.

<sup>†</sup>When compound wound speed approximately 5 per cent. higher. §These motors have special windings.

Delivery F. O. B. Bloomfield, Boston, Chicago, Cincinnati, Cleveland, Erie, Ft. Wayne, Lynn, Milwaukee, New York, Jersey City, Hoboken, Philadelphia, Pittsburgh, St. Louis or Schenectady. For warehouse deliveries write nearest house.

Power Apparatus

18-5

# Western Electric Western Electric

## D. C. CONSTANT SPEED MOTORS

#### **CONTINUOUS DUTY**

## Type RC Shunt or Compound Wound

550 VOLTS-1/3 TO 50 H.P.

	inuous ting		ist Price			Ship. Wt.		Star Dimer	ndard Pu	lley Inches		List 1	Prices		
				Motor		in Lbs. (Approx.) Motor	RC				Allow	r	Add	itions	Max. Speed with
H.P.	Rated Speed R.P.M.	Motor Only	Motor with Rheo.	with Rheo. Pulley and Base	Comp. Wind- ings	with Rheo. Pulley and Base	Frame No.	Diam.	Belt Width	Bore	Pulley	Base	Ext. Shaft	Conduit Terminal Box	Weak- ened Shunt Field
1 1	2000 2000 2000 1300	\$94 110 122 148	\$102 118 130 156	\$110 126 138 164	\$2 2 2 4	100 120 130 170	1 2 3 4	31/4 41/4 41/4 41/4	2 2 2 2 2	1 1 1 1	\$2 2 2 2	\$6 6 6	\$2 2 2 2	\$2 2 2 2	2500 2500 2500 2500 1625
2 2 3 3	1900 1300 1900 1300	158 230 230 294	172 244 244 308	180 254 254 318	4 6 6 6	170 265 265 390	4 5 5 6	41/5 41/5 41/5 41/5	2 3 3 4	1 1 1 1½	2 2 2 2	6 8 8	2 4 4 4	2 2 2 2	2375 1629 2375 1625
5 5	1900 1300	294 356	310 372	320 388	6 8	390 525	6 7	4 1/4 5 1/2	4	11/6	2 4	8 12	4	2 3	2375 1625
714 714 714	1800 1300 900	356 472 524	374 490 542	390 506 560	8 12 14	525 565 690	7 8 9	51/2 51/2 7	4 5 41⁄2	138 138 158	4 4	12 12 14	4 6 6	3 3 3	2250 1625 1125
10 10 10	1800 1250 900	472 524 630	492 544 650	508 562 670	12 14 14	565 690 860	8 9 10	51/2 7 8	5 41/2 5	1 3/8 1 8/8 1 7/8	4 4 6	12 14 14	6 6	3 3 3	2250 1565 1125
15 15	1250 900	630 776	656 802	676 822	16 18	86 1090	10 11	8 10	5 6	1 7/8 2 1/8	6 6	14 14	6 6	3 3	1565 1125
20 20 25	1250 925 900	776 1070 1166	816 1110 1380	836 1134 1348	18 24 24	1135 1820 2030	11 12 13	10 10 13	6 9 9	21/8 23/8 25/8	6 8 14	14 16 16	6 8 8	3 4 4	1565 1160 1125
30 30	1250 875	1070 1294	1222 1446	1246 1480	24 30	1820 2400	12 14	10 13	9 10	23/8 23/4	8 14	16 20	8 10	4 4	1560 1100
40 40 50 50	1225 825 1200 775	1254 1436 1426 1822	1410 1592 1482 1978	1440 1636 1616 2032	30 36 36 42	2030 2980 2400 3780	13 15 14 16	13 14 13 15	9 12 10 12	25% 3 234 314	14 20 14 22	16 24 20 32	8 10 10 12	4 4 4 4	1530 1030 1500 970

†Additions for compound winding will apply for series wound motors having same speed and output as the standard rating.

Series wound motors are not recommended for belted operation.

Delivery F. O. B. Bloomfield, Boston, Chicago, Cincinnati, Cleveland, Erie, Ft. Wayne, Lynn, Milwaukce, New York Jersey City, Hoboken, Philadelphia, Pittsburgh, St. Louis or Schenectady. For warehouse deliveries write nearest house.

# Western Electric DIRECT CURRENT MOTORS

VARIABLE SPEED



Type RL Totally Enclosed Motor Form B



Type RL Open Motor Form C

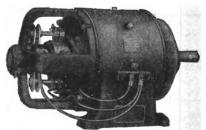
## Type RL—Variable Speed Motors—115-230 and 550 Volts

The Western Electric type RL variable speed motor is especially adapted for installations requiring from ½ to 2 h.p. capacity. The speed variation is obtained by field control, and full rated horse power may be obtained from the minimum to the maximum speed indicated. The motors may be obtained for a 2 to 1, 3 to 1, or 4 to 1 speed adjustment.

Prices and data on application.



Type RLG—Open Motor with Standard Terminal Box for Conduit Wiring Frames 111-116

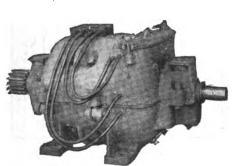


Type RLC—Open Motor Frames 200-206

## Type RLC—Variable Speed Motors—230 and 550 Volts

The Western Electric type RLC motors range in capacity of from 2 to 50 h.p., and speed variations of 2 to 1, 3 to 1, and 4 to 1. They are exceptionally rugged in mechanical construction and are absolutely reliable under the most severe service conditions. In electrical design they possess the most modern improvements. They are equipped with commutating poles, which permits rapid fluctuation in loads with no sparking at the brushes, resulting in long life for the commutator. They are also equipped with ventilating fans rigidly mounted on the shaft. This insures cool operation and allows a very large overload capacity.

Prices and data on application.



CO-2000 Motor



CO-2500 Motor with Solenoid Brake

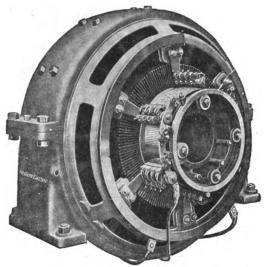
## Crane and Hoist Motors

The Western Electric crane and hoist motors range in capacity of from 1 to 200 h.p. These motors possess all the electrical and mechanical features necessary to successfully perform the exacting duties incident to general hoisting work. They are especially adapted to intermittent service. They are reversible and operate at low temperatures and with heavy overloads with absolute reliability. Prices and data on application. Digitized by GOOGLE

## DIRECT CURRENT GENERATORS



Western Electric Direct Current Generator
Type LD 2 Wire



Western Electric Direct Current Generator Type LDS 3 Wire

## Type LD-2 Wire and Type LDS-3 Wire

The type LD and LDS engine type generators represent the highest development in generators designed primarily for central station and isolated plant equipments. All generators of this design are equipped with commutating poles which insure practically sparkless commutation over the entire range of operation. The general construction embodies simplicity and mechanical strength together with high efficiency and low operating temperatures.

Standard 2-wire generators may be converted into 3-wire generators by the addition of a compensator mounted on the rear end of the armature and a slip ring mounted on the commutator end.

#### Frame

The yoke is cast of soft steel selected for high magnetic permeability and is divided horizontally above the center line to avoid disturbance of the poles in assembling or disassembling. The inside of the frame is bored to form a continuous finished seat for the reception of the poles.

#### Poles

The main poles are of laminated steel accurately punched. Commutating poles are made from rolled steel stock. All poles together with their coils are easily removable without disturbing the magnet frame or brush rigging.

#### **Fields**

The main field coils are wound on metal spool bodies with a series coil mounted outside of the shunt coil with large ventilating space between. The commutating field coil is a helical winding of copper wound edgewise, permitting a most effective heat radiation.

#### Armature

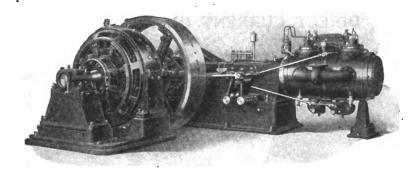
The armature core is built up of soft steel laminations thoroughly annealed after punching. Large air ducts are provided to insure perfect ventilation. Commutator segments are of selected hard drawn copper insulated from each other by high grade mica segments of proper hardness to insure even wear and sparkless operation. The commutator face is extra long, permitting the brushes to be staggered.

#### Brush Rigging

The commutating poles permit a permanent setting of brushes at the electrical neutral throughout the entire range of operation.

Prices and data on application.

## DIRECT CURRENT ENGINE DRIVEN GENERATOR



Western Electric 3 Wire Direct Current Engine Driven Generator Direct Connected to a Skinner "Universal Unaflow" Engine

#### TYPE MPC, FORMS LD AND LDS COMPOUND WOUND

Kw.	Speed	Volts		List Pri	ce		ping Win Lbs.		Am	rmal pere ting	Aver- age Volts	Poles			n Per (		Rat LD a Gen	Persible ting of nd LDS erators in Used
IXW.	Speed	VC	LD (2	LDS (3 Wire)	*For DS-2	LD (2	LDS	For DS-2	Line	3 Wire	per Bar	1 oles	11/4	Full	3/4	1/2	wit	h Gas igines
			Wire)	125- 250 V	Parts Add	Wire)	Wire)	Parts Add		Neu- tral			Load	Load	Load	Load	Kw.	Amps.
25 25	310 †280	$125 \\ 250 \\ 125 \\ 250$	\$2288 2288 2332 2332	\$2772 2849	\$583 583 583 583	3000 3000 3000 3000	3250 3250	1000 1000 1000 1000	200 100 200 100	25 25	10 10 10 10	6 6 6	85 <sup>3</sup> / <sub>4</sub> 86 <sup>1</sup> / <sub>4</sub> 85 <sup>1</sup> / <sub>4</sub> 85 <sup>3</sup> / <sub>4</sub>	86 <sup>3</sup> / <sub>4</sub> 87 86 86.5	87 87 861/4 861/2	86 86 851/4 851/4	30 30 30 30 30	240 120 240 120
35 35	300 †270	125 250 125 250	2640 2607 2750 2695	3135	638 638 638 638	3500 3500 3500 3500	3750 3750	1100 1100 1100 1100	280 140 280 140	35 35	12 12 12 12	6 6 6	87½ 87¼ 86.5 86¾	88 88¼ 87¼ 87½	881/2 883/4 873/4 88	87½ 88 87 87¼	40 40 40 40	320 160 320 160
50 50	290 †260	125 250 125 250	3190 3135 3344 3267	3729 3861	693 693 693 693	4750 4750 4750 4750	505 <b>0</b> 505 <b>0</b>	1300 1300 1300 1300	400 200 400 200	50 50	7 14 7 14	6 6 6	89 89 88¼ 88¼	893/4 90 89 89	901/4 901/2 891/4 891/4	89½ 89¼ 88¼ 88½	60 60 60	480 240 480 240
75 75	275 †250	125 250 125 250	4070 3883 5346 4037	4675	825 825 825 825	6900 6700 6900 6700	7100 7100	2000 2000 2000 2000	600 300 600 300	75 75	9 9 9	6 6 6	89.5 90 89 <sup>1</sup> / <sub>4</sub> 89 <sup>3</sup> / <sub>4</sub>	90½ 90¾ 90 90½	91 91½ 90½ 91	90 90½ 89½ 90	85 85 85 85	680 340 680 340
100 100	260 †235	$\begin{array}{c} 125 \\ 250 \\ 125 \\ 250 \end{array}$	4961 4719 5181 4917	5632 5819	957 957 957 957	8350 8300 8350 8300	8800 8800	2800 2800 2800 2800	800 400 800 400	100 100	10 10 10 10	6 6 6 6	901/4 903/4 90 90.5	$91$ $91\frac{1}{2}$ $90\frac{3}{4}$ $91\frac{1}{4}$	91¼ 91¾ 91 91 91½	90½ 91 90 90¾	115 115 115 115	920 460 920 460
125 125	250 †225	$\begin{array}{c} 125 \\ 250 \\ 125 \\ 250 \end{array}$	5841 5566 6050 5808	5596 6798	1122 1122 1122 1122	10500 10400 10500 10400	1100 <b>0</b> 11000	4000 4000 4000 4000	1000 500 1000 500	125 125	11 11 11 11	6 6 6	90¼ 91 89¾ 90.5	$\begin{array}{c} 91 \\ 91^{3}4 \\ 90^{3}4 \\ 91^{1}2 \end{array}$	91¼ 92¼ 91 91¾	90½ 91¾ 90 91	145 145 145 145	1160 580 1160 580
150 150	225 †200	125 250 125 250	7227 6512 7568 6820	7612 7964	1287 1287 1287 1287	11500 11300 11500 11300	12000 12000	4400 4400 4400 4400	1200 600 1200 600	150 150	8 15 8 15	8 8 8	89½ 91¼ 89¼ 90½	$90\frac{1}{2}$ $91\frac{3}{4}$ $90\frac{1}{4}$ $91\frac{1}{4}$	$90\frac{1}{2}$ $91\frac{3}{4}$ $90\frac{1}{4}$ $91\frac{1}{4}$	89½ 91¼ 89¼ 90½	170 170 170 170	1360 680 1360 680
200 200	200 †180	125 250 125 250	9317 8217 9713 8613	9537 9944	1441 1441 1441 1441	15450 15250 15450 15250	16200 16200	4900 4900 4900 4900	1600 800 1600 800	200 200	9 16.5 9 16.5	8 8 8	90 91¼ 89¾ 91	91 92 90½ 91¾	91 92 90½ 91¾	90 91¼ 89¾ 91	230 230 230 230	1840 920 1840 920
200 200	150 †135	$\frac{250}{125}$	10912 9922 11374 10373	11539 11990		21200 20700 21200 20700	22100 22100		1600 800 1600 800	200 200	8 16.5 8 16.5	8 8 8	90 91 89½ 90¾	9034 91½ 90¼ 91¼	903/4 911/2 901/4 911/4	90 91 89½ 90¾	230 230 230 230 230	1840 920 1840 920
200 200	110 †100	$\frac{250}{125}$	13750 12595 14190 13090	14487 14927		23000 23000 23000 23000	24800 24800		1600 800 1600 800	200 200	6.5 16.0 6.5 6.5	10 10 10 10	89 90 88½ 89½	90 90 <sup>3</sup> / <sub>4</sub> 89 <sup>1</sup> / <sub>2</sub> 90 <sup>1</sup> / <sub>4</sub>	90 90 <sup>3</sup> / <sub>4</sub> 89 <sup>1</sup> / <sub>2</sub> 90 <sup>1</sup> / <sub>4</sub>	89 90 88½ 89½	230 230 230 230 230	1840 920 1840 920

Power Apparatus

<sup>\*</sup> DS-2 parts include base, shaft, 2 pedestals with bearings. Coupling is extra. Half coupling is not recommended. Base supports generator magnet frame and both bearings only. It is not a common base for engine and generator.
† These machines are designated as slow speed.
\*\* Generators driven by gas engines should be recommended on a D.D.-0 basis, i.e., without base, shaft or bearings.
Prices are F.O.B. factory, including boxing and field rheostats, and for three wire machines also compensator and collector ring. Standard connections are located on under side of frame. For any other location, add \$50.00 list per-machine. 26-1

Power Apparatus

## DIRECT CURRENT BELT-DRIVEN GENERATORS AND EXCITERS Belt-driven Generators

					O BEAR				T T T E IAI	L, IIIK	EBEAR	NG, F	CI WAL	EEL	LIFE
				1	List Pric	es			1	List Price	9	Ship.		-	
KW. S	Speed	Frame	Poles	35 Volt Shunt	125 or 250 V. Com- pound	Volts Com-	in I (Appr		35 Volt	125 or 250 V. Com- pound	Volts Compound	Wt. in Lbs. (Ap-	No. 50 Watt Lights	Di	ulley men. Inches
					2-Wire	3-Wire	Ship.	Net	Shunt	2-Wire	3-Wire	prox.)		Dia.	Width
1 1 ½ 1 ½ 1 ½ 1 ½ 1 ½ 2 ½ 2 ½ 2 ½ 3 3 4 4 4 5 5 5 6 6 6 7 ½ 2 ½ 8 10 112 115 116 116 116	1200 1550 2000 1500 1500 1800 2000 1050 1350 1875 1700 700 1850 1275 1600 650 1400 950 525 1250 875 1200 875	вввссссопрепереседенствинг	444444444446666666666666666666666666666	\$198.00 198.00 198.00 198.00 253.00 253.00 253.00 341.00 341.00 440.00 341.00 440.00	\$198.00 198.00 198.00 253.00 253.00 253.00 341.00 341.00 440.00 539.00 440.00 440.00 539.00 693.00 924.00 693.00 924.00 693.00 924.00 1924.00	\$533.50 649.00 825.00 649.00 632.50 825.00 632.50 825.00 632.50 825.00 632.50	230 230 230 350 350 350 350 350 350 350 350 350 1200 557 825 825 1200 1700 12100 1700 2100 2100 2100 210	150 150 150 260 260 260 460 685 1000 460 465 1000 1465 1000 1465 2150 2150 2150	\$250.80 250.80 303.60 303.60 303.60 303.60 401.50 401.50 526.90 401.50 526.90 526.90	\$250.80 250.80 250.80 250.80 303.60 303.60 303.60 401.50 526.90 401.50 526.90 401.50 526.90 649.00 832.70 649.00 1105.50 832.70 1105.50 1105.50 1272.70	\$620.40 620.40 758.00 965.80 758.00 1257.30 965.80 1521.30 965.80 1521.30 1521.30 1257.30 1257.30	315 315 315 315 500 500 500 800 1100 1650 800 1100 2400 2400 2400 2400 2400 2400 24	15 20 30 30 40 50 60 80 80 80 100 120 120 150 150 220 240 320 320 440 500	4 4 4 5 5 5 5 5 5 6 6 8 8 8 10 12 11 11 11 11 11 11 11 11 11 11 11 11	22222233333453455465956699

TYPE LF, TWO BEARING

17 11					‡List Pric	es	7774		1 (		1	List Pric	es	777	
KW.	Speed	Frame	Poles	35 Volts Shunt	125 or 250 V. Com- pound	Volts Com-	L	in os. orox.)	KW.	Speed	35 Volts	125 or 250 V. Com- pound	Volts Com-	Wt. Lb (App	08.
-				Dadat	2-Wire	3-Wire	Ship.	Net			Shunt	2-Wire		Ship.	Net
20	500	15	6			\$2348.50		2635	45	375		\$1551	\$2651	6330	
27	475	20	6			1892.00		2975	50	650		1881	2150	4950	
30	750	15	6		1353.00	1633.50	3130	2635	55	950		1551	1881	3400	2975
27 30 35	465	25	6		1892.00	1892.00	4950	4160	70	925		2167	2150	4950	4160
40	1000	15	6		1553.00	2348.50	3130	2635	75	620		1551	2651	6330	5240
40	700	20	6		1633.50	2348.50	3400	2975	90	750		1881	2651	6330	5240

In ordering, state size of pulley and whether front or back of board type rheostat is desired.

These generators will carry full rated load for 24 hours with a rise in temperature as measured by thermometer not exceeding 40 degrees C. on windings and 45 degrees C. on commutator; they will then carry 25 per cent. overload for 2 hours with a temperature rise not exceeding 55 degrees C. on any part of the machine, and will carry 50 per cent. overload momentarily without injury. Shunt-wound generators are recommended for use in parallel with storage batteries.

Belt-driven Exciters, Type ML, 125 Volts

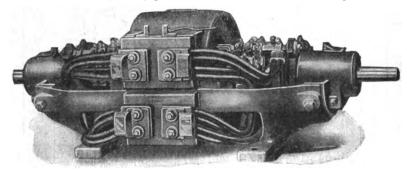
To Be Used with Alternators as Listed

Ex	citers	Kv-a.	KW. 0.8	Speed	KW. Excitation	Form	Poles	Wgt.	in Lb.	Frame	Poles	List Price,
KW.	Speed	IXV-a.	P-F.	Dpoca	Required	101111	10,00	Ship.	Net	- Tumo	2 0100	Only
11/2	2000		25 371/2 50	1200 1200 1200	1.0 1.1 1.2	*PB *PB *PB	6 6	230	150	В	4	\$198.00
21/2	1800		75	1200 900	2.0 2.5	*PB	.68	350	260	C	4	253.00
*4	1350	25 35	100	300 300 900	3.1 3.1 3.4	†D †D *PB	24 24 8	575	460	D	4	310.00
5	1800		150 100 100 150	900 720 600 720	3.8 3.8 3.5 4.7	*PB *PB *PB *PB	8 10 12 10	575	460	D	4	310.00
6	1275	f 50	150 200 200 200	600 720 600 327	4.5 5.0 5.6 4.6	*PB *PB *PB †D	$\begin{vmatrix} 12 \\ 10 \\ 12 \\ 22 \end{vmatrix}$	825	685	Е	4	440.00
71/2	1600	50 75 75 75		300 300 277 257	4.6 5.6 5.6 4.5	†D †D †D †D	24 24 24 26 28	825	685	E	4	440.00
8	1050	100 100 125 125 175		257 225 200 277 257 257	6.3 6.6 6.7 6.6 6.3	†D †D †D †D †D	32 36 26 26 26	1200	1000	F	4	539.00
10	1400	125 150		225 200	5.6 8.0	†D	32 36	1200	1000	F	4	539.50
10 11	850 600	175 200 150		225 164 120	6.0 9.5 10.0	†D †D †D	32 J 44 60	1700 2100	1465 1650	G H	6	639.00 924.00
15	525	{ 250 312		120 120	14.0 15.0	†D †D	60 }	2500	2150	I	6	1089.00

NOTE: Prices include iron sub-base, belt-tightener, pulley and rheostat.
\*Belt-driven alternator. †Engine driven alternator. These exciters may be used with or without TA voltage regulators.
†Delivery F. O. B. Factory, Ft. Wayne, Ind. For warehouse deliveries write nearest house.

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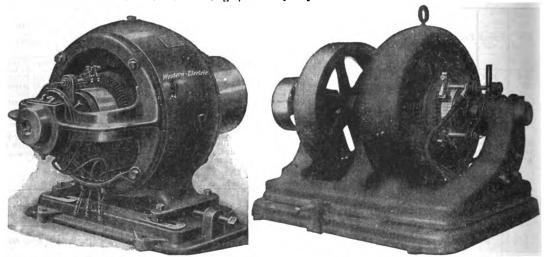
# Western Electric DIRECT CURRENT GENERATORS



Western Electric Electrolytic Generator DEG Design

## Electrolytic Generators DEG Design

The Western Electric Type DEG generator for use in electro-metallurgy is furnished in five sizes. The 1½ k.w. 250 amperes, and 3 k.w. 500 amperes at 1800 r.p.m. for 2 to 6 volts, are self-exciting and furnished with one commutator only. The larger sizes, 5 k.w., 10 k.w., and 15 k.w., with two commutators are separately excited, and have current capacities at 10 volts of 500, 1000 and 1500 amperes and at 5 volts of 1000, 2000 and 3000 amperes respectively. They may be equipped direct connected to an alternating or direct current motor for all standard voltages, or with pulley for belt drive.



Western Electric Type B Low Voltage Direct Current Generator

Western Electric ML No Flicker Generator

Belt Driven Low Voltage Generators

1/2 TO 9 K.W.

The Western Electric Type ML and Type B direct current generator is especially adapted for service requiring a low voltage generator of from 1/2 to 9 k.w. capacity. The voltage of this generator is from 30 to 35 volts, and they are extensively used in low voltage isolated plant installations. The Type B generator has been adopted as standard by the Electric Storage Battery Company for the

isolated plants which they handle.

## No Flicker Generator FOR GAS ENGINE DRIVE

The Western Electric Type ML generators are peculiarly adaptable to gas engine belt drive. They have proved exceptionally valuable in isolated plants and small central stations due to their service reliability and economy of operation and maintenance. A line of these generators wound for low voltage is especially adapted to charging storage batteries. Smooth operation and excellent voltage regulation are insured by a perfectly balanced flywheel supported between pedestal bearings.

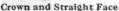
Ratings

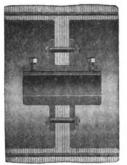
The Type ML generators range in capacities from ¾ to 16 k.w. for voltages of 35, 125, 250 or 550 volts and may be shunt or compound wound. The standard accessories supplied with each generator consist of pulley, base, flywheel and rheostat.

Prices and data on application.

## Western Electric PAPER PULLEYS







**Double Crown Face** 



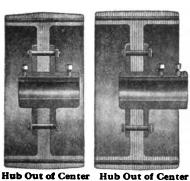
Double Web

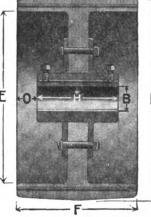


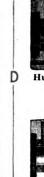
Hub in Center













**Hub in Center Hub Out of** Center





How to Order

Rockwood Paper Pulleys

The effectiveness of belted machinery is dependent on a uniform speed. Iron, wooden and covered iron pulleys are unreliable. A belt pulley of paper to a large degree, if not entirely, overcomes the annoyance and loss occasioned by slipping belts. Paper pulleys are especially recommended for operating electric light plants and electric motors, where the highest belt efficiency is necessary for their success.

The advantages of the paper pulley are: reduced slipping, decreased belt tension, more power transmitted, and lower total cost of pulleys and belting.

There being no shrinkage strains, as in cast iron, or numerous pieces, as in wood pulleys, they may be run at very high rates of speed with safety, and are not easily damaged in handling.

The following specifications should be given.

1. Number of pulleys wanted. 2. Diameter (D). 3. Total width of face (see note 1). 4. Width of belt. 5. Exact bore or shaft diameter (B) (see note 3). 8. Length of hub (see note 4). 9. Distance from end of hub edge of rim (O) (see note 5). 10. Kind of face, whether crown, straight, double crown or combination (see note 6). 11. (a) If double crown give width of crown on side dimension "O" is given. 12. (a) If combination face, give width of crown face. (b) Width of straight face. 13. Least allowable inside diameter of rim (E) (see note 7).

Note 1. Paper pulleys are rounded at the edges of the rims and the total width of face should exceed

Note 1. Paper pulleys are rounded at the edges of the rims and the total width of face should exceed the width of belt as follows: Up to 2 inches plus ¼ inch, 2 inches to 5 inches plus ½ inch; 5 inches to 10 inches plus ¾ inch; 10 inches to 24 inches plus 1 inch; 24 inches to 36 inches plus 1½ inches; above 36 inches

plus 2 inches.

Note 2. Bores of pulleys or shaft diameters should not be ordered as "scant" or "full." If bores are not standard send wire gauges with orders.

Note 3. If not otherwise specified keyways are made straight and set screws placed over keyways.

Note 4. Unless otherwise specified the length of the hubs are made approximately two thirds (%) of the width of faces of pulleys. Exceptions to this rule are necessarily made when the widths of the faces are unusually narrow for the given diameters, and in the smaller sizes of sleeve or small motor pulleys, which are made with hubs the full widths of the faces.

Note 5. If pulleys are to be used on dynamos or motors, give dimensions "O" on sides of pulleys next

to the bearing of machines.

Note 6. Use abbreviations: "C" for crown, "SF" for straight face, "DC" for double crown face, "Com." for combination face. Hubs will be placed under the crowns of combination face pulleys and dimensions "O" should be given for that side.

Hubs will be placed under the widest crowns of double crown face pulleys and in the center of pulleys

having two equal crown faces.

Note 7. If rim of pulley is to overhang or extend over a bearing or other similar part of machine, give the smallest allowable inside diameter the rim may be, making an allowance of the for clearance. The rims of paper pulleys are thicker than those of cast iron pulleys.

Prices on application.

## Western Electric CONTROLLING DEVICES

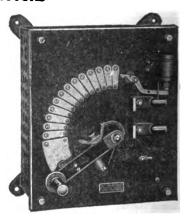
FOR ALTERNATING CURRENT MOTORS



CR 1027 Motor Starter for Type KS Squirrel Cage Single Phase Motors



For Type RI Repulsion Induction Single Phase Motor Up to 7½ H.P.



For Type RI Repulsion Induction Single Phase Motors Larger than 7½ H.P. CR 1025 Motor Starters

## Single Phase Motor Starters

Salient Features

1st. The low voltage release opens the circuit in case of failure of power. 2nd. A long de insures that the arc will be broken. 3rd. Large fibre washer protects the hand of the operator. 2nd. A long dead segment at the off position

Type CR 1027 for Squirrel Cage Motors

The Type CR-1027 starters are designed for starting Western Electric Type KS Squirrel Cage single-phase induction motors, and consist of a resistance-reactance coil assembled in a well-ventilated box, on the front of which is mounted a slate

motors, and consist of a resistance-reactance coil assembled in a well-ventilated box, on the front of which is mounted a slate base containing the starting switch and no-voltage release.

The switch contacts are composed of renewable segments. One of these segments is made up of two parts, one part being connected to the resistance and the other to the reactance. A stop latch located underneath the starting arm prevents the operator from throwing the arm to the running position without first stopping on the starting segment.

The 10 and 15 H.P. starters are provided with tap on the starting resistance-reactance so that the starting torque can be changed to meet service conditions. Taps are not necessary on the smaller sizes.

70/10		110 Volts			220 Volts						
H.P. of Motor	List No.			Approx.	H.P.	List No.			Annear		
	60 Cycles	40 Cycles	List Price	Ship. Wt.	of Motor	60 Cycles	40 Cycles	List Price	Approx. Ship. Wt.		
14	187090 187092 197094	187108 187110 187112	\$36.00 36.00 44.00	25 25 60	1 1/4	187091 187093 187095	187109 187111 187113	\$36.00 36.00 44.00	25 25 60		
2 3 5	187096 187098 187100	187114 187116 187118	44.00 52.00 52.00	60 75 75	2 3 5	187097 187099 187101	187115 187117 187119	44.00 52.00 52.00	60 75 75		
7½ 10 15	187102 187104 187106	187120 187122	60.00 92.00 100.00	90 110 140	7½ 10 15	187103 187105 187107	187121 187123	60.00 76.00 92.00	90 110 140		

Ordering Directions
When ordering CR-1027 starters the H.P., voltage, speed, frequency and serial number of the motor with which it is to be used should be clearly stated.

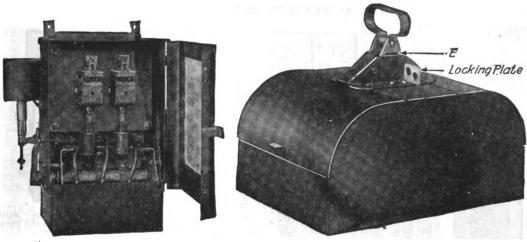
Type CR 1025 for Repulsion Motors

The Type CR-1025 starting rheostats have been designed primarily for use with the Western Electric single-phase repulsion motor (Type RI) where the inrush of current resulting from throwing the motors directly upon the line is objectionable. When these motors are started by being thrown directly upon the line they require from 2½ to 3½% of full load current. While in many cases this starting current may not be objectionable, it is recommended that a starting box be installed in every case with the 7½, 10 and 15 H.P. motors and with the smaller motors where it is desired to reduce the starting current. When a starting box is used, the inrush of current at the instant of starting is approximately 1½ full load current.

These rheostats are for starting duty only where the starting period does not exceed one minute.

220 Volts, 60 Cycle 110 Volts, 60 Cycle Approx. Ship. Wt. List List H.P. H.P. List No. List No. Price Price \$17.00 20 187079 \$17.00 Up to 1 Incl. 187072 Up to 1 incl. 17.00 17.00 19.00 22.00 54.00 54.00 17 00 17 00 19 00 22 00 28 00 54 00 187073 **2**0 187080 25 25 26 26 26 26 80 187074 187075 25 35 187081 187082 75 80 187076 187083 187085 .00

## INDUCTION MOTOR STARTING SWITCHES



CR-1031 Starting Switch with Cover Open

CR-1038 Motor Starting Switch and Box

## Type CR-1031 Starting Switch

Enclosed Overload Relays-Low Voltage Release

The CR-1031 Starting Switch has been designed for throwing small squirrel cage motors directly on the line. The construction is the same as that of the standard CR-1034 Compensator except that the overload relays are mounted in the space occupied by the compensator coils. The overload relays afford absolute protection to the motor against overload, and running single phase.

The time element of the overload relays may be varied so that the motor is not disconnected from the

line with every fluctuation of load, but is protected against serious overloads.

Overload relays protect the motor from running single-phase. The starting switch is provided with a hinged cover and snap catch.

CR-1031 switches have the following features: Switch contacts are oil immersed, insuring long life. All

parts are totally enclosed. Overload relays protect the motor from overload and have a wide range of adjustment.

List No. List Price CR-1031 Switches for squirrel cage induction motors up to and including 71/2 H.P., 110, 220, 440 and 550 volts.....



Protective Plug

## **CR-1038 Starting Switches**

The CR-1038 Starting Switches are especially adapted for connecting small A.C. motors directly to the line, and are suitable for use with motors up to and including 3 H.P. 110 volt, 440 volt, 550 volt and 5 H.P. 220 volt. The device consists of a triple pole single throw quick make and break switch, and two special receptacles for protective plugs mounted on a slate base and totally enclosed in a sheet iron case with the operating handles projecting through the front and suitable holes in the bottom for leads. Overload protection is obtained by two time limit protective plugs which contain a stationary contact post with a heating coil and a fusible link binding a spring conwhich also passes through the post link and contact arm. The time lag in the heating coil prevents the momentary starting current from causing the plug to open the circuit. Branch circuit fuses must be installed as specified in the Underwriters' code, as the protective plugs do not protect the branch circuit from short circuit. Each switch is provided with a locking plate so that the motor cannot be started until plate is unlocked. All padlocks require different keys, but two master keys fitting all locks will be furnished free of charge when 10 or more locks are ordered at the same time. The standard practice is to furnish protective plugs rated approximately 25% in excess of the full load motor current.

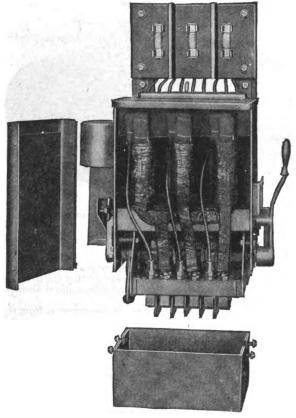
List No.	*List	Price Each
173836	Switch complete with two protective plugs and two extra links	. \$16.00
<b>220</b> 018	Protective plug with spare link	1.30
167539	Fusible link	1.30
220019	Padlock with two keys.	2.30
<b>220020</b>	Master key.	70

Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house,

# Western Electric

## CONTROLLING DEVICES

FOR ALTERNATING CURRENT MOTORS



Form H2 Compensator with Fuses, Cover and Oil Tank Removed



H-2 Compensator with Fuses, Cover and Oil Tank in place



Form 3 Compensator with Overload Relays

# Type CR 1034 Starting Compensators for TWO AND THREE PHASE SQUIRREL CAGE INDUCTION MOTORS

The Form K, or squirrel cage, motor can be started by simply closing the stator or primary switch, and the motor will then carry its load up to nearly synchronous speed, but with a large inrush of current at the moment of starting.

In order to reduce this current, when the maximum starting effort is not necessary, a Type CR-1034 Starting Compensator is employed. This compensator acts as a transformer, reducing the potential at the terminals of the motor and consequently diminishing the current taken by it.

The compensator consists of coils (three for three phase and two for two phase) wound upon laminated iron cores, and an oil immersed switch assembled in a suitable case. The switch in the off position is held by a latch in such a way as to prevent its being thrown directly into the running position.

#### SALIENT FEATURES OF WESTERN ELECTRIC COMPENSATORS

The handle cannot be left in starting position.

The handle cannot be moved to running position without first being thrown to the starting position.

The low-voltage release opens the circuit in case of failure of voltage.

Fuses or overload relays open the circuit in case of overload.

Switches are oil immersed, thus eliminating sparking and insuring long life of contacts.

Compound treatment of the coils makes them practically waterproof.

Simplicity of wiring.

Accessibility of taps and contacts. See following page for prices.

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## CONTROLLING DEVICES

## For Alternating Current Motors

# TYPES CR-1034 STARTING COMPENSATOR FOR TWO AND THREE PHASE SQUIRREL CAGE

		•			IND	UCTIO	ICTION MOTORS						
	Enclo	sed Over	load Rel	ay or Fu	lses			1	Low-Volt	age Rele	ease		
L	ist		List	List	Size	No.	L	ist		List	List		No.
3-Phase	2-Phase	H.P.	Price 3-Phase	Price 2-Phase	3- Phase	2- Phase	3-Phase	2-Phase	H.P.	Price 3-Phase	Price 2-Phase	3- Ph <b>as</b> e	2- Phase
	11	0 VOLT	S60 C	YCLES					OLTS—6			nt'd)	
1001	1759	5-51/2	\$132	<b>\$</b> 130	1	1	1641 1644	1799 1802	110-125 135-150	\$372 416	\$384 432	4 4	3 4
1605 1609	1763 1767	7½ 10	132 140	136 144	1 1	1	1647	1805	175-200	464	434	4	4
	1 1			}	-	_	1857		250	700	<u> </u>	5	<u> </u>
1613 1617	1771 1775	12-15 20	140 248	144 256	1 3	1 3		55	0 VOLTS	3—60 C	YCLES		
1621	1779	25	272	280	3	3	1604	1762	5-51/2	\$132	\$136	1	
	22	O VOLT	S60 C	YCLES			1608 1612	1766 1770	$\frac{7\frac{1}{2}}{10}$	132 140	136 144	1	1 1
1002	1760	5-51/2	<b>\$</b> 132	\$136	1	1	1616	1774	12-15	140	144	1	1
1606 1610	1764 1768	$\frac{7\frac{1}{2}}{10}$	132 140	136 144	1 1	1 1	1620	1778 1782	20 25	156 164	160 168	1 1	1 1
	1				-	]	1624	i i		1		-	-
1614 1618	1772 1776	12-15 20	140 156	144	1 1	1 1	1627 1627	1785 1785	30 35	192 192	196 196	2 2	2
1622	1780	25 25	164	168	i	i	1627	1785	40	192	196	2	$\begin{vmatrix} \tilde{2} \\ 2 \end{vmatrix}$
1625	1783	30	240	248	2	2	1631	1789	50	212	220	2	2
1625	1783	35 40	240 240	248 248	3	3	1635	1793	60-75	288	296	3	3
1625	1783	40				~	1639	1797	85-100	312	320	3	3
1629	1787	50 60–75	264 340	272 356	3 3	3 3	1642	1800	110-125	372	384	4	3
1633 1637	1791 1795	85–100	388	404	3	4	1645 1648	1803 1806	135–150 175–200	416 464	432 484	4	4
	<u> </u>	l 	<u> </u>	<u> </u>	<u>!</u>	<u> </u>		*22	00 VOLT	'S-60 C	YCLES		
	44	W VOLT	S60 C	YCLES					With Ov	erload R	Celays	_	
1603 1607	1761 1765	5-5½ 7½	\$132 132	\$136 136	1 1	1 1	2719 2720	2738 2739	15–20 <b>2</b> 5	1	1	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	3 3
1611	1769	10	140	144	i	i	2721	2740	30-40	Ę	g .	3	3
1615	1773	12–15	140	144	1	1	2722	2741	50-55	ati.	atic	3	3
1619 1623	1777 1781	20 25	156 164	160 168	1 1	1 1	2722 2723	2742 2742	60 75	l ig	işi	3 4	4
	1				-	1	1			B	de	1	-
1626 1626	1784 1784	30 35	192 192	196 196	2 2	2 2	2724 2725	2743	85–100 110–125	l g	a a	4	4 4
1626	1784	40	192	196	2	2	2726	2745	135-150	Prices on application	Prices on application	4	4
1630	1788	50	212	220	2	2	2727	2746	175–200	Pri	Pri	4	5
1634	1792	60-75	288	296	3	3	2728		250		l	5	

Prices cover compensators complete with no-voltage release and oil for switch tank. They also include fuses and fuse bases for compensators of 550 volts or less, and overload relays with enclosing covers for 2200 volt compensators.

#### **EXTRAS**

For overload relays with enclosing covers in place of fuses for 550 volts or less add \$32.00 list to the above prices.

If enclosing covers for conduit wiring are desired add \$48.00 list for sizes 1 and 2. For overload relays and ammeter, add \$88.00. For overload relays, ammeter and conduit wiring case, add \$104.00.

1638 | 1796 | 85-100 |

312 | 320 | 3 | 3

For enclosing covers for fuse panels, add \$6.00.

Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house.

## Western Electric CONTROLLING DEVICES

FOR DIRECT CURRENT MOTORS
For Series, Shunt or Compound Wound Motors







Fig. 2 Fig. 1 CR-1000 Direct Current Motor-Starting Rheostats

CR-1000 rheostats are recommended for use with motors which, when not overloaded in starting, will attain full speed in one minute or less. They can also be used for starting motors overloaded 50 per cent., providing the resistance is not in circuit over thirty seconds. These rheostats have been so designed that they comply with the service rules of the American Institute of Electrical Engineers, viz., one minute starting

duty every four minutes for one hour.

Fig. 3 illustrates the type of starter used above 35 H.P., 115 volts, 50 H.P., 230 volts, and 20 H.P., 550 volts. This starter comprises a knife-blade type of dial switch so interlocked with a line contactor as to provide low-voltage release as well as positive making and breaking of the circuit. This contactor is also

provided with a magnetic blowout coil.

The motor circuit is not made or broken on the dial switch and no arcing can possibly occur thereon. The contactor when once opened can be closed again only with the starting arm at the initial starting

Resistance units throughout this entire line of motor-starting rheostats are absolutely fireproof.

9000, Form P resistance units are used in the following sizes:

1/8-5 H.P. inclusive, 115 volts.

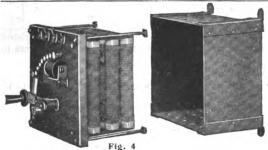
1/8-71/2 H.P. inclusive, 230 volts.

1/8-20 H.P. inclusive, 550 volts.

In the larger sizes cast grid resistance units are used.

In rheostats 2 H.P. and larger the Form P units are mounted on supports independent of the iron box the supports being fastened to the slate top of the rheostat; consequently the resistance can be removed for inspection or necessary repairs without disturbing the units or their connections.

Good	115 Volts for 90 to 1	30 Volts		Good			9	Good for 450 to 600 Volts				
List No.	List Price	Ap- prox. Ship. Wt.	Fig. No.	List No.	List Price	Ap- prox. Ship. Wt.	Fig. No.	List No.	List Price	Ap- prox. Ship. Wt.	Fig.	
111901 111902 111903 111904 111905 111907 111908 114019 114020 114021 111912 111913 111914 111915 157783 157784 157785	\$8.30 8.30 8.80 8.80 8.80 12.00 12.70 16.50 28.60 44.00 52.80 55.00 59.80 66.00 168.00 204.00 222.00 2216.00	16 16 16 16 16 22 22 24 100 115 185 198 204 335 470 480 480	1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 3 3 3 3 3	111916 111917 111918 111920 111920 111921 111922 111923 111924 114023 114023 114024 114025 111930 111931 111932 157789 157789 157790 157791	\$8. 30 8. 30 8. 80 8. 80 8. 80 13. 20 17. 60 19. 80 35. 20 46. 00 48. 00 57. 20 60. 00 70. 00 80. 00 180. 00 180. 00 184. 00 20. 00	18 16 16 16 16 20 22 28 32 100 115 115 115 180 186 198 200 350 370 500	1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 3 3 3 3	111933 111934 111935 111935 111937 111938 111939 111940 111941 111942 111943 111944 197901 197902 197903 197904 197905 197906 157801 157802 157803	\$4.50 4.50 8.80 8.80 8.80 15.40 17.60 19.80 22.00 28.60 44.00 160.00 160.00 166.00 178.00 178.00 178.00 188.00	16 16 16 16 16 22 20 26 32 32 32 32 30 300 300 300 300 350 350 355 355 356 357 357	111111111111111111111111111111111111111	
	List No.  111901 111902 111903 111904 111905 111907 111908 114019 114020 114021 111912 111912 111913 1157783 157783	List   No.   Price	List No. Price Ship. Wt. 11901 \$8.30 16 111902 8.30 16 111903 8.80 16 111904 8.80 16 111905 8.80 16 111905 12.00 22 111907 12.70 22 111908 16.50 24 114019 28.60 100 114020 39.60 115 114021 44.00 180 11912 52.80 185 111913 55.00 192 111914 59.80 198 111915 66.00 204 157783 168.00 335 157784 204.00 470 157785 228.00 470 157786 222.00 480	Cood for 90 to 130 Volts   Aprox.   Fig.   No.   Price   Ship.   No.   Wt.   No.   Ship.   No.   Wt.   No.   No.	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Cood for 90 to 130 Volts	



CR-1000 Rheostat with Resistance Removed from Box Power Apparatus

The above prices cover rheostats with low-voltage release only.

#### Overload Release

If on sizes up to and including 35 H.P., 115 volts; 50 H.P., 230 volts and 20 H.P., 550 volts, an overload release is desired in addition to low-voltage release, add \$7.00 list to above prices. For larger sizes CR-1102 is recommended.

#### ORDERING DIRECTIONS

Rheostats with low-voltage release only should be ordered by List No.

Rheostats with low-voltage and overload release should not be ordered by List No., but order should give the H.P. rating and voltage of the motor, with the statement that the overload release is desired.

Delivery F. O. B. Factory, Schenestady, N. Y. For warehouse deliveries write nearest house.



# Western Electric CR-1100 D.C. MOTOR STARTING PANELS

## FOR DIRECT CURRENT MOTORS

#### Line Switch and Fuses

CR-1100 Starting Panels consist of standard CR-1000 Starting Rheostats and a double-pole line switch and fuses, mounted on a slate base. The resistance is designed for one minute starting duty once every four minutes for an hour. These panels are all arranged for wall mounting and are particularly recommended on account of economy of space, compactness and the added neatness given the complete equipment.

#### **Overload Protection**

These rheostats may be furnished with an overload release coil which in case of overload will short circuit the low-voltage release coil, allowing the starting arm to CR-1100 Starting Panel return to the "off" position.

	ĺ	115 V	olts			230 V	olts		550 Volts				
н.р.	List No. of Panel	List Price	Ship. Wt.	List No. of Fuses	List No. of Panel	List Price	Ship. Wt.	List Nc. of Fuses	List No. of Panel	List Price	Ship. Wt.	List No. of Fuses	
1/4	112673	\$29.00	60	59379	112684	\$29.00	60	59951	112695	\$35.00	60	42638	
1/2	112674	29.00	60	59381	112685	29.00	60	59379	112696	35.00	60	42639	
1/2 3/4	112675	29.00	60	34952	112686	29.00	60	34950	112697	35.00	60	42639	
1	112676	29.00	60	34953	112687	29.00	60	59381	112698	35.00	60	34992	
2	112677	40.00	80	34956	112688	40.00	80	34953	112699	44.00	80	34993	
3	112678	42.00	80	34958	112689	40.00	80	34955	112700	44.00	80	59385	
5	112679	50.00	80	34962	112690	46.00	80	34956	112701	48.00	80	34995	
71/2	119787	70.00	150	34967	112691	48.00	80	34959	112702	50.00	80	34997	
10	119788	148.00	150	34970	119790	76.00	150	34961	112703	52.00	80	34998	
15	119789	102.00	250	34976	119791	94.00		34967	112704	54.00	150	35100	
20	112683	102.00	275	34980	119792	100.00	150	34970	112705	74.00	150	35103	

The above prices cover panels with low-voltage release only.

#### Overload Release

If overload release is desired in addition to low-voltage release, add \$6.50 list to above prices.

## CR-1102 D.C. Motor Starting Panels

CR-1102 Starting Fanel is the same as CR-1100 except that the fuses are replaced by a double pole circuit breaker, and the starter has a low-voltage release.

#### Circuit Breaker

		115 Volts			230 Volts		550 Volts			
H.P.	List No.	List Price	Approx. Ship. Wt.	List No.	List Price	Approx. Ship. Wt.	List No.	List Price	Approx. Ship. Wt.	
1 / 2 3 5 7 1/2 10 15 20 25 30 35 40 50	104247 104248 104249 104250 119799 119800 119801 104254 104255 104256 104257 126935	\$58.00 60.00 60.00 64.00 90.00 104.00 140.00 150.00 154.00 160.00 280.00	124 124 124 150 170 180 275 400 400 450 450 425	104258 104259 104260 104261 104262 119802 119803 119804 119805 104267 104268 104269	\$58.00 60.00 60.00 64.00 66.00 100.00 110.00 140.00 150.00 150.00	124 124 124 170 170 175 250 270 270 425 450	104271 104272 104273 104274 104275 104276 104277 104278 198011 198012 198013 198014	\$66.00 68.00 70.00 74.00 78.00 80.00 92.00 230.00 230.00 230.00 230.00	124 124 124 170 170 175 250 270 350 350 350 350 400	
50 60 75 85 100 125	126936 126937 126938 126939 126940 142763	320.00 330.00 340.00 680.00 690.00 1520.00	425 425 425 600 600 750	104270 126941 126942 126943 126944 126945	280.00 290.00 330.00 340.00 370.00	500 425 425 425 425 425 425	198015 126949 126950 126951 126952 126953	230.00 260.00 260.00 270.00 270.00 280.00	400 425 425 425 425 425 425	

#### ORDERING DIRECTIONS

Give the List Number of the starting panel and state the horse power and voltage of the motor with which the starting panel is to be used.

# Western Electric

## CONTROLLING DEVICES

For Direct Current Motors









Fig. 1 Fig. 2 1/4, 1/4, 1/2, 1/4 H.P. 1 to 71/2 H.P. Incl. 115, 230 and 550 Volts 115, 230 and 550 Volts 2 Starting and 8 Starting and 16 Field Points 16 Field Points

Fig. 3 10 and 15 H.P. Incl., 115 Volts 10 to 25 H.P. Incl., 230 Volts 10 to 20 H.P. Incl., 550 Volts 11 Starting and 20 Field Points

Fig. 4 20 to 35 H.P. Incl., 115 Volts 30 to 50 H.P. Incl., 230 Volts 12 Starting and 20 Field Points

#### CR-1200 D.C. SPEED REGULATING RHEOSTATS

For Shunt or Compound Wound Variable Speed Motors Only
CR-1200 rheostats are designed for use with variable speed motors, the speed control of which is obtained by varying the resistance inserted in the field circuit.

These controlling rheostats comprise a starting switch of the type used on CR-1000 rheostats. The starting switch is provided with a projection carrying a sliding contact which bears on the contact buttons connected to the field resistance. An auxiliary arm on the rheostat front retains a short circuit on the field resistance during the period of starting, and on the starting resistance after the motor attains normal speed. The short circuit is also retained on the starting resistance, when the

starting arm is turned back to vary the running speed of the motor. When starting the motor, the starting arm cannot be left in any position on the contact buttons until it has been turned when starting the motor, the starting arm cannot be test any position to the right and engaged the auxiliary arm, forcing the latter to be retained by the low-voltage release coil. The auxiliary arm then withholds the spring which affects the starting arm, and thereby makes it possible to leave the starting arm in any position that will give the desired speed control of the motor. Upon failure of voltage the retaining coil is de-energized, releasing the auxiliary arm, which releases the spring that carries the starting arm to the "off" position, thus opening the motor

A feature is provided, however, so that it requires a little extra pressure to move the arm beyond the maximum speed point to call the operator's attention to maximum speed position so he will not unintentionally shut down the motor.

The contacts of the auxiliary arm are designed to take care of any possible arcing and in the larger sizes are protected by an auxiliary carbon block.

Overload Protection: These rheostats can be furnished with an overload release which in case of overload will short circuit the low-voltage release coil.

Fireproof and moisture proof resistance units are used with the controllers as follows:

All field resistances; all starting resistances up to and including 10 H.P., 115 and 230 volts; up to and including 20 H.P., 550 volts, CR-9000 (Form P)

All starting resistances 15 H.P. and larger 115 and 230 volts, Cast Grid (Form C).

	List Prices											
H P. of Motor	2 to 1	Speed Vari	ation	3 to 3	I Speed Var	iation	4 to 1	Approx. Ship. Wt.				
	115 Volts	230 Volts	550 Volts	115 Volts	230 Volts	550 Volts	115 Volts	230 Volts	550 Volts	.,,,		
1/8 1/4 1/2 3/4	\$31.00 31.00 31.00 33.00	\$31.00 31.00 31.00 31.00	\$31.00 31.00 31.00 31.00	\$38.00 38.00 38.00 40.00	\$38.00 38.00 38.00 38.00	\$38.00 38.00 38.00 38.00	\$48.00	\$44.00	\$44.00	20 20 20 20 20		
1 2 3 4 5	33.00 37.00 37.00 46.00 48.00	35.00 37.00 40.00 40.00 40.00	35.00 36.00 42.00 42.00 44.00	40.00 44.00 44.00 54.00 54.00	42.00 44.00 48.00 48.00 48.00	42.00 44.00 50.00 50.00 52.00	46.00 50.00 50.00 60.00 62.00	48.00 50.00 54.00 54.00 54.00	48.00 50.00 56.00 56.00 58.00	25 25 25 25 25 25 35		
7½ 10 15 20 25 30 35 40	$\begin{array}{c} 48.00 \\ 76.00 \\ 96.00 \\ 112.00 \\ 116.00 \\ 132.00 \\ 150.00 \end{array}$	46.00 70.00 90.00 96.00 96.00 116.00 122.00 130.00	48.00 70.00 92.00 96.00	76.00 104.00 120.00 140.00 158.00	54.00 78.00 98.00 104.00 104.00 124.00 130.00	56.00 78.00 100.00 104.00	64.00 82.00 110.00 126.00 130.00 146.00 164.00	60.00 84.00 104.00 110.00 110.00 130.00 136.00 144.00	62.00 84.00 106.00 110.00	40 45 100 100 100 150 150 200		
40 50	150.00	130.00 140.00			138.00 148.00		104.00	144.00 154.00		1		

With low-voltage release only.

With low-voltage release only.

If overload release is desired in addition to low-voltage release, add \$6.00 list to above prices.

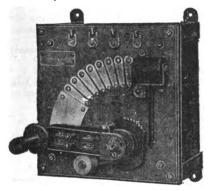
Ordering Directions: In ordering rheostats give H.P. rating and voltage of the motor.

If the rheostat is to be used with a W.E. motor, the order should be accompanied with the complete name plate rating of the motor. If the rheostat is to be used with other than a W.E. motor the order should be accompanied with advice as to the maximum shunt field current and the ohms necessary to insert in the field circuit to give the maximum speed increase. In ordering rheostats with low-voltage and overload release include, in addition to above, the statement that the overload

release is desired. Note: Motor Agents, U. S. Government and Machine Manufacturers, consult Specialist

# Western Electric CONTROLLING DEVICES

FOR DIRECT CURRENT ADJUSTABLE SPEED [MOTORS ARMATURE CONTROL—MACHINE SERVICE



CR-1220—Renewable Segment Type Speed Regulating Rheostat

## CR-1220 Speed Regulating Rheostats

CR-1220 speed regulators for machine service are designed to reduce the speed of the motor 50 per cent. from normal at full load by inserting resistance in the armature circuit, the resistance and switch contacts having ample capacity to carry the current continuously on any point without overheating. These rheostats should be installed with motors where the same amount of current is required at half speed as at full speed. CR-1220 rheostats are equipped with renewable segments which may be easily replaced from the front of the rheostat should they become worn or pitted by frequent operation.

The retaining coil for low-voltage protection is connected across the line in series with a high resistance and is, therefore, independent of the strength of the motor field current. This permits the same rheostat to be used with either shunt, series or compound wound motors.

In the large sizes the motor circuit is made and broken by a contactor and not on the switch contacts, thus preventing arcing and subsequent burning of these contacts. A rugged knife-blade type of switch is used, with segments that can be renewed, if desired, but this is seldom necessary, as all arcing is handled by the contactor, which is provided with a strong magnetic blowout, and all parts liable to wear are renewable. The switch is interlocked with the contactor, so as to provide low-voltage protection.

#### With Overload Release

These rheostats can be furnished with an overload release which in case of overload will short circuit the low-voltage protective coil.

	115 Volts				230 Volts		550 Volte			
H.P. of Motor	List No.	List Price	Approx. Ship. Wt.	List No.	List Price	Approx. Ship. Wt.	List No.	List Price	Approx. Ship. Wt.	
14 12 23 57,14 10 10 10 10 20 25 30 35 40 45	59209 59210 59211 59212 59213 59214 100818 144787 144788 144789 *144799 *144791 *144792 *144793	\$22.00 26.00 29.00 31.00 44.00 72.00 84.00 92.00 140.00 200.00 300.00 310.00	30 35 47 47 82 112 120 335 500 500 500 870 1200	59216 59217 59218 59219 59220 59221 100819 144798 144799 144800 144801 144803 **144804	\$22.00 26.00 29.00 31.00 42.00 50.00 88.00 96.00 106.00 108.00 240.00 240.00 230.00	30 35 47 47 82 112 325 325 500 500 740 770 780	59225 59226 59227 59228 59229 59230 100820 144813 144814 144815 144816 *144818 *144818 *144819	\$23.00 26.00 30.00 32.00 42.00 50.00 96.00 104.00 110.00 210.00 240.00 250.00	30 35 47 47 82 112 120 330 335 515 650 650 650	
45 50 75 100 125 150 200 250	†*144795 †*144796 †*144797	484.00 580.00 590.00	1300 1600 1700	*144806 *144807 *144808 **144809 **144810 **144811	370.00 380.00 200.00 560.00 640.00 820.00 880.00	1250 1250 1250 1300 1700 2230 2250	*144821 *144822 †*144823 †*144824 †*144825 †*144826 †*144827 †*144828 †*144829	320.00 330.00 340.00 360.00 480.00 300.00 600.00 1060.00 1100.00	1200 1200 1250 1250 1300 1350 1700 2800 3000	

<sup>\*</sup>Rheostats equipped with contactor for making and breaking the armature circuit. †Speed controlling rheostat panel.

#### Overload Release

If overload release is desired in addition to low-voltage protection, add \$6.50 list to above prices for sizes up to and including 15 H.P., 115 volts; 25 H.P., 230 volts, and 20 H.P., 550 volts. For overload release on larger sizes prices will be furnished on application.

#### ORDERING DIRECTIONS

Rheostats with low-voltage protection only should be ordered by List No.
Rheostats with low-voltage protection and overload release should not be ordered by List No., but order should give the H.P. and voltage of the motor with the statement that the overload release is desired.
Delivery F. O. B. Factory Schenectady, N. Y. For warehouse deliveries write nearest house.

The above prices cover rheostats with low-voltage protection only.

## CONTROLLING DEVICES



CR-1221 D.C. Speed Regulating Rheostat

## For Direct Current Adjustable Speed Motors

CR-1221 D.C. SPEED REGULATING RHEOSTATS

#### Button Contacts-Armature Control-For Machine Service

CR-1221 Speed Regulating Rheostats for machine service are designed to reduce the speed of the motor 50 per cent. from normal at full load by inserting resistance in the armature circuit, the resistance and switch contacts having ample capacity to carry the current continuously on any point without overheating. These rheostats should be installed with motors where the same amount of current is required at half speed as at full speed.

The retaining coil for low-voltage protection is connected across the line in series with a high resistance and is, therefore, independent of the strength of the motor field current. This permits the same rheostat

to be used with either shunt, series or compound wound motors.

CR-1221 Rheostats are supplied with button contacts. If renewable segments are wanted, see CR-1220.

#### With Overload Release

These rheostats can be furnished with an overload release which in case of overload will short circuit the low-voltage protective coil.

н.р.		115 Volts			230 Volts		550 Volts			
of Motor	List No.	List Price	Approx. Ship. Wt.	List No.	List Price	Approx. Ship. Wt.	List No.	List Price	Approx. Ship. Wt.	
1/8 1/4 1/2	58314 58315 58316	\$15.50 17.50 21.00	20 30 35	58326 58327 58328	\$15.50 17.50 21.00	20 30 35	58338 59339 58340	\$15.50 17.50 21.00	20 30 35	
1 2	58317 58318 58319	24.00 27.00 38.00	47 47 82	58329 58330 58331	24.00 27.00 38.00	47 47 82	58341 58342 58343	24.00 27.00 38.00	47 47 82	
3 5 7½	58320 100815	46.00 64.00	112 120	58332 100816 144830	44.00 60.00 80.00	112 120 325	58344 100817 144832	44.00 60.00 90.00	112 120 300	
10 15				144831	88.00	325	144833 144834	96.00 130.00	300 300	

The above prices cover rheostats with low-voltage protection only.

#### Overload Release

If overload release is desired in addition to low-voltage protection, add \$6.50 list to above prices.

#### ORDERING DIRECTIONS

Rheostats with low-voltage protection only should be ordered by List No.

Rheostats with low-voltage protection and overload release should not be ordered by List No., but order should give the horse power rating and voltage of the motor with the statement that the overload release is desired.

Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house.

## CONTROLLING DEVICES

## For Direct Current Adjustable Speed Motors

CR-1225 Speed Regulating Rheostats for fan service are designed to reduce the speed of the motor 50 per cent. from normal, at full speed where the load varies directly with the speed, by inserting resistance in the armature circuit, the resistance and switch contacts having ample capacity to carry the current continuously on any point without overheating.

They should be specified for use with motors driving ventilating fans, small job presses, ice cream

freezers, centrifugal pumps, etc.

CR-1225 Rheostats are supplied with button contacts. If renewable segments are wanted, see CR-1224. The retaining coil for low-voltage protection is connected across the line in series with a high resistance and is, therefore, independent of the strength of the motor field current. This permits the same rheostat to be used with either shunt, series or compound wound motors.

#### With Overload Release

These rheostats can be furnished with an overload release which in case of overload will short circuit the low-voltage protective coil.

# CR-1225 D.C. SPEED REGULATING RHEOSTATS Button Contacts—Armature Control—For Fan Service

H.P.		115 Volts		FILESC. 1	230 Volts	Type	550 Volts			
of	List	List	Approx.	List	List	Approx.	List	List	Approx.	
Motor	No.	Price	Ship. Wt.	No.	Price	Ship. Wt.	No.	Price	Ship. Wt.	
1/8	59607	\$15.50	20	59619	\$15.50	20	59631	\$15.50	20	
1/4	59608	17.50	30	59620	17.50	30	59632	17.50	30	
1/2	59609	21.00	35	59621	21.00	35	59633	21.00	35	
3/4	59610	24.00	40	59622	24.00	40	59634	24.00	40	
1	59611	27.00	40	59623	27.00	40	59635	27.00	40	
2	59612	38.00	85	59624	38.00	85	59636	38.00	85	
3	59613	46.00	110	59625	44.00	110	59637	44.00	100	
5	100821	60.00	200	100822	60.00	200	100823	60.00	200	
7½ 0 5	100821	00.00	200	144863 144864	80.00 100.00	300 300	144865 144866 144867	90.00 110.00 140.00	300 300 440	

# CR-1224 D.C. SPEED REGULATING RHEOSTATS Renewable Segments—Armature Control—For Fan Service

1/4	59827	\$24.00	30	59834	\$22.00	30	59843	\$23.00	30
3/2	59828	26.80	35	59835	<b>2</b> 6.00	35	59844	26.00	35
1/4	59829	29.00	40	59836	29.00	40	59845	30.00	` 40
1	59830	31.00	40	59837	31.00	40	59846	32.00	40
2	59831	44.00	85	59838	42.00	85	59847	42.00	85
3	59832	52.00	110	59839	50.00	110	59848	50.00	110
5	100824	64.00	200	100825	68.00	200	100826	64.00	200
71/2	144835	70.00	375	144843	<b>8</b> 8. <b>00</b>	300	144853	96.00	300
10	144836	110.40	375	144844	110.00	300	144854	120.00	300
15	144837	140.00	480	144845	130.00	460	144855	152.00	440
20	*144838	270.00	550	144846	170.00	500	144856	160.00	500
25	*144839	280.00	700	144847	192.00	780	*144857	240.00	600
30	*144840	320.00	740	*144848	280.00	780	*144858	240.00	650
35	*144841	340.00	780	*144849	320.00	780	*144859	280.00	670
40	*144842	360.00	1060	*144850	330.00	1060	*144860	300.00	930
45				*144851	370.00	1140	*144861	330.00	930
50	J			*144852	380.00	1200	*144862	340.00	930

<sup>\*</sup>Rheostats equipped with contactor for making and breaking the armature circuit.

#### Overload Release

If overload release is desired, in addition to low-voltage protection, add \$6.50 list to above prices for sizes up to and including 15 H.P. 115 volts, 25 H.P. 230 volts and 20 H.P. 550 volts. For overload release on larger sizes prices will be furnished on application.

#### ORDERING DIRECTIONS

Rheostats with low-voltage protection only should be ordered by List No.

Rheostats with low-voltage protection and overload release should not be ordered by List No., but order should give the horse power rating and voltage of the motor, with the statement that the overload release is desired.

Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house.

The above prices cover rheostats with low-voltage protection only.

## MOTOR STARTERS

CR-2301 Self-starters—Low-Voltage Protection



Type CR-2301

## Type CR-2301 Self-starters

The following prices cover the devices complete exclusive of float switch, pressure governor or switch for hand contact. CR-2301

		CK-	-2301		
	115 Volts			230 Volts	
List	H.P.	List Price	List	H.P.	List Price
No.	of Motor	Each	No.	of Motor	Each
176099	1 or less	<b>\$2</b> 0.00	176102	1 or less	<b>\$21.00</b>
176100	2	22.00	176103	2	23.00
176101	3	22.00	176104	3	<b>23</b> .00
194545	<b>5</b> .	56.00	194540	5	<b>56</b> . <b>0</b> 0
			194541	71/2	<b>56</b> . <b>0</b> 0
			194542	10	<b>64</b> . <b>0</b> 0
		CR-	2302		
194543	1 or less	<b>\$30</b> .00	194547	1 or less	<b>\$32.00</b>
194544	<b>2</b>	30.00	194548	2	<b>32</b> .00
194545	3	32.00	194549	3	<b>32</b> . <b>0</b> 0
194546	5	68.00	194550	5	78.00
			194551	$7\frac{1}{2}$	70.00
			194552	10	<b>76.00</b>
		CR-	-2303		<b>\</b>
194553	1 or less	<b>\$46.00</b>	194557	1 or less	<b>\$4</b> 8.00
194554	2	48.00	194558	<b>2</b>	<b>50</b> .00
194555	3	48.00	194559	3	<b>50</b> . <b>00</b>
194556	5	82.00	194560	5	82.00
			194561	71/2	84.00
			194562	10	90.00
		CR-	-2305		
194563	1 or less	\$52.00	194567	1 or less	<b>\$54.00</b>
194564	<b>2</b>	54.00	194568	. 2	<b>56.0</b> 0
194565	3	54.00	194569	3	<b>56</b> . <b>00</b>
194566	5	90.00	194570	5	90.00
	-		194571	71/2	92.00
			194572	10	98.00

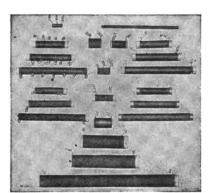
#### †Note Carefully-Voltage Variation

All of the above starters are suitable only on circuits where the line voltage is never more than 10

per cent. lower or higher than the values given above. CR-2302, CR-2303 and CR-2305 Self-starters are designed for use with motor-driven pumps where it is desired to automatically start and stop the motors depending upon a predetermined change in fluid level. fluid pressure or air pressure. They are, however, well suited to start and stop motors by hand control from points remote from the motor.

Delivery F. O. B. Factory.

## CR 9000 G. E. RESISTANCE UNITS





Canadity Dance

1



Form PM Resistance Units



Resistance Units

Tint Dries

## Type P Resistance Units

In the construction of Form P resistance units, a low temperature coefficient resistance wire is wound on an asbestos tube making them non-fragile. After being wound the tube is treated with a special compound forming a coating inside and out, reinforcing the tube and imparting strength and solidity. A porcelain bushing is inserted in each end of the tube, the coating compound cementing it in place. The unit when thoroughly baked results in a very efficient unit, the coating being a good conductor of heat;

this produces uniform radiation.

Form P units are extensively used in small motor starting and controlling apparatus and for armature and field resistance. They are also used as permanent resistances to protect circuit breaker coils, and as series resistance in signal work, etc. The units are mounted in punched end frames by means of porcelain

bushings which insure good insulation from the frames.

Form PM units are similar to the Form P, except that metal bushings are used in place of the porcelain.

The Form PE unit is a special type of the Form P and is used extensively in connection with switchboard instruments. A special porcelain bushing is used in this type and the leads are attached on the inside of the tube. They are enclosed in perforated metal casings, to adapt them for switchboard mounting, which produces a neat appearance, and at the same time provides good ventilation and protection.

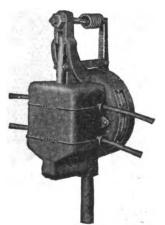
#### List Prices and Data Forms P and PM Resistance Units

Ohms         Continuous         Each           Size A.         5½ ins. long, 1 in. diameter, capacity: less than 500 ohms, 35 watts; 500 ohms and above, 15 watts.         15 matts.         \$0.70           From         0.25 to 125         From 12 to 0.528	Capacity Range		List Price
15 watts. From 0.25 to 125	Ohms	Continuous	Each
15 watts. From 0.25 to 125	Size A. 5½ ins. long,	1 in. diameter, capacity: less than 500 ohms, 35 watts	; 500 ohms and above,
From 150 to 300 From 0.438 to 0.342		. ,	,
From 500 to 3500 From 0.17 to 0.065	From 0.25 to 125	From 12 to 0.528	\$0.70
From 500 to 3500 From 0.17 to 0.065	From 150 to 300	From 0.438 to 0.342	
20 watts. From 0.25 to 150 From 14 to 0.576. \$0.70 From 175 to 400 From 0.535 to 0.35 1.00 From 500 to 5000 From 0.20 to 0.063 1.10 Size C. 11½ ins. long, 1 in. diameter, capacity: less than 500 ohms, 80 watts; 500 ohms and above, 30 watts. From 0.10 to 150 From 28.2 to 0.73 \$1.10 From 200 to 450 From 0.63 to 0.421 1.00 From 500 to 1800 From 0.24 to 0.12 1.20 From 4800 to 5000 From 0.08 to 0.07 1.30 Size D. 11 ins. long, 2 ins. diameter, capacity 175 watts. From 0.25 to 450 From 26.5 to 0.62 \$1.90 Size E. 22 ins. long, 2 ins. diameter, capacity 350 watts. 0.25 \$7 From 0.3 to 0.6 From 34 to 24 2.50 From 0.75 to 3.5 From 22 to 10.5 2.40 From 4 to 7.5 From 10 to 7.2 2.00 From 10 to 30 From 6.2 to 3.6 1.80 From 35 to 450 From 3.3 to 0.88 1.80 From 0.25 to 450 From 3.3 to 0.88 1.80 From 0.25 to 450 From 3.3 to 0.88 1.60 Note: Type Form PM units are the same as the prices of the Form P for the A, B and C sizes only.			
20 watts. From 0.25 to 150 From 14 to 0.576. \$0.70 From 175 to 400 From 0.535 to 0.35	Size B. 71/2 ins. long.	1 in, diameter, capacity; less than 500 ohms, 50 watts;	500 ohms and above.
From 0.25 to 150 From 14 to 0.576. \$0.70 From 175 to 400 From 0.535 to 0.35 1.00 From 500 to 5000 From 0.20 to 0.063 1.10  Size C. 11½ ins. long, 1 in. diameter, capacity: less than 500 ohms, 80 watts; 500 ohms and above, 30 watts. From 0.10 to 150 From 28.2 to 0.73 \$1.10 From 200 to 450 From 0.63 to 0.421 1.00 From 500 to 1800 From 0.24 to 0.12 1.20 From 4800 to 5000 From 0.08 to 0.07 1.30  Size D. 11 ins. long, 2 ins. diameter, capacity 175 watts. From 0.25 to 450 From 26.5 to 0.62 \$1.90  Size E. 22 ins. long, 2 ins. diameter, capacity 350 watts.  0.25 37 \$3.00 From 0.3 to 0.6 From 34 to 24 2.50 From 0.75 to 3.5 From 22 to 10.5 2.40 From 4 to 7.5 From 10 to 7.2 2.00 From 4 to 7.5 From 10 to 7.2 2.00 From 35 to 450 From 6.2 to 3.6 1.80 Size F. 7½ ins. long, 2 ins. diameter, capacity 115 watts. From 0.25 to 450 From 3.3 to 0.88 1.60 Size F. 7½ ins. long, 2 ins. diameter, capacity 115 watts. From 0.25 to 450 From 21.4 to 0.5 \$1.60 Note: Type Form PM units are the same as the prices of the Form P for the A, B and C sizes only.		2 III diminotory superity i land vitale 500 Sililio, 50 Wastely	occ chill and above,
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From 4800       to 5000       From 0.08 to 0.07       1.30         Size D. 11 ins. long, 2 ins. diameter, capacity 175 watts.         From 0.25 to 450       From 26.5 to 0.62       \$1.90         Size E. 22 ins. long, 2 ins. diameter, capacity 350 watts.         0.25       \$3.00         From 0.3 to 0.6 From 34 to 24       2.50         From 0.75 to 3.5 From 22 to 10.5       2.40         From 4 to 7.5 From 10 to 7.2       2.00         From 10 to 30 From 6.2 to 3.6       1.80         From 35 to 450 From 3.3 to 0.88       1.60         Size F. 7½ ins. long, 2 ins. diameter, capacity 115 watts.         From 0.25 to 450 From 21.4 to 0.5       \$1.60         NOTE: Type Form PM units are the same as the prices of the Form P for the A, B and C sizes only.			
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From       0.75 to       3.5       From 22 to 10.5       2.40         From       4 to       7.5       From 10 to 7.2       2.00         From       10 to       30       From 6.2 to 3.6       1.80         From       35 to       450       From 3.3 to       0.88       1.60         Size F.       7½ ins. long, 2 ins. diameter, capacity 115 watts.         From       0.25 to       450       From 21.4 to       0.5       \$1.60         NOTE: Type Form PM units are the same as the prices of the Form P for the A, B and C sizes only.			
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From 10 to 30 From 6.2 to 3.6 1.80 From 35 to 450 From 3.3 to 0.88 1.60  Size F. 7½ ins. long, 2 ins. diameter, capacity 115 watts. From 0.25 to 450 From 21.4 to 0.5 \$1.60  Note: Type Form PM units are the same as the prices of the Form P for the A, B and C sizes only.	From 0.75 to 3.5	From 22 to 10.5	<b>2</b> .40
From 35 to 450 From 3.3 to 0.88	From 4 to 7.5	From 10 to 7.2	
Size F. 7½ ins. long, 2 ins. diameter, capacity 115 watts.  From 0.25 to 450 From 21.4 to 0.5	From 10 to 30	From 6.2 to 3.6	1 . 80
From 0.25 to 450 From 21.4 to 0.5	From 35 to 450	From 3.3 to 0.88	1.60
From 0.25 to 450 From 21.4 to 0.5	Size F. 71/2 ins. long.	2 ins. diameter, capacity 115 watts.	
NOTE: Type Form PM units are the same as the prices of the Form P for the A, B and C sizes only.	From 0.25 to 450	From 21 4 to 0.5	\$1.60
	NOTE: Type Form PM	units are the same as the prices of the Form P for the	A. B and C sizes only.
The ordering specify chapt of this area dispere capacity desired.		exact ohins and amnere canacity desired.	

Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house. 46-1

Power Apparatus

## Western Electric DIAPHRAGM PRESSURE AND VACUUM SWITCHES



CR 2925 Pressure Switch with Metal Cover



CR 2925 Pressure Switch with Cover Removed

## Pressure and Vacuum Switches

The diaphragm pressure and vacuum switches are designed for the automatic control of electric motors

The diaphragm pressure and vacuum switches are designed for the automatic control of electric motors which drive pumps for hydraulic or pneumatic water and vacuum systems. They are positive in operation and will open and close at a predetermined pressure with no danger of the contacts sticking or "freezing."

The bottom of a cup or pan-shaped body casting is closed by a lexible phosphor-bronze diaphragm. The switch mechanism is mounted on top of this casting. As the position of the diaphragm is varied by the internal pressure, its motion is communicated to the switch mechanism which in turn causes the switch contacts to open and close when certain ranges of movement of the diaphragm are reached.

The switch is of double-pole, quick-break construction and the current-carrying parts are exceptionally rugged and are capable of heavy overloads. The normal rating is 20 amperes at 110 volts and 10 amperes, 220 volts, either alternating or direct current.

Connecting cables are secured directly to stationary contacts eliminating the necessity of flexible connection to movable parts of the switch.

The pressure switch is supported by the % inch supply pipe, requiring no other bracket or support. The vacuum switch is provided with 3 feet for wall mounting.

Both the pressure and vacuum switches can be provided with either glass or metal covers.

The range of adjustment of each switch is given in the tabulation shown below. These valves are secured by tightening or loosening the spring.

Either glass or metal covers are furnished for all switches, vacuum or pressure. The List Nos. cover switches with metal covers. If a glass cover is required the order should read as follows one CR 2925 (state vacuum or pressure) switch similar to List No. (give No.) except with glass cover.

#### SALIENT FEATURES

A phosphor-bronze diaphragm is used which is practically indestructible.

The current-carrying parts of the double-pole switch are entirely insulated from the mechanism.

The quick-break feature insures absolute rupture of all arcs.

Switch mechanism is positive in its action and will not vary with operating pressure.

Auxiliary contacts prevent switch contacts from burning.

Switching mechanism is totally enclosed.

These switches occupy a comparatively small space and weigh very little.

		Standard Adjustment		Range of Adjustment				Ap-	•••
List No.	*Rating			Minimum		Maximum		prox. Shpg.	List Price Each
	•	Closes	Opens	Closes	Opens	Closes	Opens	Wt.	29000
99817 99818 190381 99819 190382	Low pressure Medium pressure Medium pressure High pressure Vacuum (15 ins. of	15 lbs. 35 lbs. 30 lbs. 90 lbs.	30 lbs. 50 lbs. 50 lbs. 110 lbs.	5 lbs. 20 lbs. 20 lbs. 70 lbs.	20 lbs. 35 lbs. 40 lbs. 90 lbs.	25 lbs. 70 lbs. 65 lbs. 110 lbs.	40 lbs. 85 lbs. 85 lbs. 130 lbs.	35 35 35 35 35	\$32.00 32.00 32.00 32.00
	mercury)	5 ins.	15 ins.	5 ins.	15 ins.	20 ins.	30 ins.	35	44.00

\*These switches are capable of handling 20 amperes at 110 volts, or 10 amperes at 220 volts, on either alternating or direct current circuits.

Delivery F. O. B. Factory, Ft. Wayne, Ind. For warehouse deliveries write nearest house.

## Western Electric FLOAT SWITCHES







Totally Enclosed Float Switch with Cover in Place

## CR-2930 Single Pole Float Switch

CR-2930 single pole float switches are used for remote control of automatic starting rheostats or panels together with the usual accessories, namely, float, chain pulleys and counterweight, for the automatic starting and stopping of motors when it is desired to maintain a predetermined water level on an open tank or reservoir system. The switch contacts are designed for handling pilot circuits for self-starters, or for controlling the main line circuits of small motors where the current does not exceed the values given in the table below.

List No.	Description	Amperes Capacity (A.C. or D.C.)	Wgt. Lbs.	List Price
58971	Single pole	(15 at 110/125 Volts) {10 at 220/250 Volts} 5 at 500/550 Volts}	20	\$12.00
58972	Double Pole	25 at 110/125 Volts 15 at 220/250 Volts 10 at 500/550 Volts	45	20.00

Accessories for Use with the Above Float Switches

List No. List Price 

## CR-2931 Totally Enclosed Float Switches

For Use as Either Tank or Sump Switches

For Use as Either lank or Sump Switches

CR-2931 enclosed switches are weatherproof and are suitable for tank or sump switches, in the case of the latter, it only being necessary to change the lever or the float from the right to the left side of the switch.

The switches are enclosed in a cast iron case arranged for 1½ inch conduit which enters at the top. The lower half of the case is removable for making connections and inspection.

All sizes are suitable for 30 amperes, either alternating or direct current, up to 550 volts, when connected in a motor circuit and are also suitable for all control circuits.

To eliminate all arcing and burning of the contacts, the switch is arranged for quick breaking. This snap action is accomplished by means of a counterweight.

List No.	Form	No. of Poles	Wgt. Lbs.	List Price	List No.	Form	No. of Poles	Wgt. Lbs.	List Price
141636	A	S.P.	40	\$42.00	141644	ę	8.P.	75	\$50.00
141637	A	D.P.	40	44.00	141645		D.P.	75	52.00
141638	A	T.P.	65	51.00	141646	C	T.P.	100	62.00
141639	A	4P	65	56.00	141647	C	4P.	100	64.00
141640	B	8.P.	75	48.00	141648	D	8.P.	65	•52.00
141641	B	D.P.	75	50.00	141649	D	D.P.	65	•54.00
141642 .	B	T.P.	100	60.00	141650	D	T.P.	90	*64.00
141643	B	4P.	100	62.00	141651	D	4P.	90	*66.00

Form A is for clamping to the inside top edge of the tank and is operated by a rod and float.
Range, 10 inches to 2 feet.
Form B is for bolting to tank cover and requires a guide in the cover for the operating rod.
Range, 10 inches to 3½ feet.
Form C is the same as Form B except that no guide is required in the tank cover.
Range, 10 inches to 3½ feet.
Form D is for bolting to tank cover and is operated by a chain and float, thus being suitable for any depth of tank or stiny in water lavel, not been then 10 inches.

variation in water level not less than 10 inches.

Length of chain should be specified on all orders.

Motors of 34 H.P. and less, 115 and 230 volts, can be thrown directly on the line by means of float switch, pressure governor or knife switch.

Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house. 48

# Western Electric FIELD RHEOSTATS

## For Direct Current Generators

CR-8000 AND CR-8001\_D.C. FIELD RHEOSTATS
For Front and Back of the Board Mounting
Plate Type—Hand-Operated

#### CONSTRUCTION

In the construction of CR-8000 and CR-8001 field rheostats resistance coils of negligible temperature co-efficient are imbedded and hell in place in a special cement, which is a particularly good heat conductor and electric insulator. As shown by Figure 1, the contact buttons are circular and are spaced a sufficient distance apart to prevent dirt or dust from accumulating and short circuiting them.



Fig. 1
CR-8000 Field Rheostats for Mounting in Front of Switchboard Panel

#### **HANDWHEELS**

In order to conform to the present standard switchboard practice, that is, of having instruments and fittings on the front of the board of a black finish, the standard handwheels supplied with these rheostats are of a highly polished black material, thereby adding greatly to the appearance of the rheostats, as well as furnishing a pleasing effect when mounted on the switchboard panel.

A polished brass handwheel can be supplied if necessary.

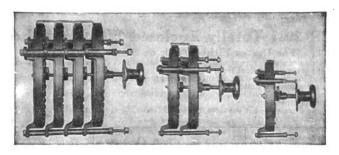


Fig. 2
CR-8001 Field Rheostats for Mounting on Back of Switchboard Panel

#### DRILLING TEMPLATES

In order to facilitate the drilling of switchboard panels on which these rheostats are to be mounted, drilling templates are always forwarded with the rheostats when they are shipped.

#### RESISTANCE

The resistance material used in field rheostats is 'an alloy which has a negligible temperature co-efficient, and which will not disintegrate under constant use. Hence the rheostats maintain constant resistance when in service. Attention is called to the large number of divisions of resistance in this line of field rheostats. It will be noted that the 10-inch plates have 35 divisions of resistance, the 12-inch plates have 50 divisions of resistance, and the 15-inch plates have 70 divisions of resistance. The advantages obtained by having a large number of divisions of resistance are evident, that is, the operator can maintain a very even generator voltage or accurately adjust the speed of motors when the rheostats are used for this purpose.

See following page for prices.

## D.C. FIELD RHEOSTATS

(CONTINUED)

## For Direct Current Generators CR-8000 AND CR-8001 D.C. FIELD RHEOSTATS

13378			CK-80			D.C. FIELD	KHEUS	IAIS		\_'
Probable   Panel   Step   St			0		<del></del>		No. of			
33378	Front of	Back of	Onms						Front of	Back of
3389					125					
1.25	43576 43578 43580	43579	240	. 63	.32	300-250 250-200 200-165	1	10	10.00	\$14.00 14.00 14.00
3399	43582 43584 43586	43585	120	1.25	. 63	125-100	1	10	10.00	14.00 14.00 14.00
	43588 43590 43592	43591	60	2.5	1.25	60-50	1	10	10.00	14.00 14.00 14.00
12.5   12.5   12.5   10.5   16.3   13.10   2   12   26.00   30.00	43594 43596 43598	43597	30	5	2.5	30-25	l i	12	14.00	14.00 18.00 18.00
	13600 13602 84636	43603	15	10	5	16-13	1	15	17.00	18.00 21.00 30.00
3814	13606 13608 34638	43609	7.5	20	10	8-6.5	2	15	31.00	30.00 35.00 50.00
	1361 <b>3</b> 1361 <b>4</b> 1361 <b>6</b>	43615	3.75	40	20	4.2-3.1	4	15	62.00	50.00 66.00 81.00
3822 43823 240 1.25 63 250-200 1 10 10.00 \$10.00 14.0  3824 43623 240 1.25 63 250-200 1 10 10.00 14.0  3825 43625 200 1.5 .75 200-165 1 10 10.00 14.0  3826 43627 150 2 1 165-125 1 10 10.00 14.0  3828 43629 120 2.5 1.25 125-100 1 12 14.00 18.0  3828 43631 100 3 1.5 100-85 1 12 14.00 18.0  3829 43631 75 4 2 85-63 1 12 17.00 18.0  3832 43633 75 4 2 85-63 1 12 17.00 18.0  3834 43637 48 6.3 3.2 50-40 1 15 17.00 21.0  3838 43639 37.5 8 4 40-30 2 12 2 26.00 30.0  3848 43639 37.5 8 4 4 0.30 2 12 2 26.00 30.0  3844 43643 25 12.5 6.3 25-20 2 15 31.00 35.0  3844 3364 3649 12 25 12.5 6.3 25-20 2 15 31.00 35.0  3844 43645 20 15 7.5 20-16.5 3 15 46.00 50.0  3844 43647 15 20 10 16.5-12.5 4 15 62.00 66.0  3846 43647 15 20 15 7.5 20-16.5 3 15 78.00 82.0  3846 43649 12 25 12.5 12.5-10 5 15 77.00 21.0  3850 43651 10 30 15 10-8.3 6 15 92.00 96.0  3850 43651 10 30 76 38 80-700 1 15 17.00 21.0  3850 43651 10 0 0 .84 .40 650-600 1 15 17.00 21.0  3852 43639 300 2 1 15 5.50-500 1 15 17.00 18.0  3852 43655 480 1.25 .5 550-500 1 15 17.00 18.0  3852 43655 480 1.25 .5 550-500 1 15 17.00 18.0  3852 43655 480 1.25 .5 550-500 1 15 17.00 18.0  3852 43655 480 1.25 .5 550-500 1 10 16.00 18.0  3852 43655 480 1.25 .5 550-500 1 12 14.00 18.0  3852 43655 480 1.25 .5 550-500 1 15 17.00 21.0  3852 43655 480 1.25 .5 550-500 1 10 10 10.00 18.0  3852 43655 480 1.25 .5 550-500 1 10 10 10.00 18.0  3852 43655 480 1.25 .5 550-500 1 10 10 10.00 18.0  3852 43655 480 1.25 .5 550-500 1 15 17.00 21.0  3864 43667 125 5 2.5 1.25 100 2 15 31.00 35.0  3865 43667 125 5 2.5 1.25 100 2 15 31.00 35.0  3866 43667 125 5 2.5 1.25 100 2 15 31.00 35.0  3878 4367 40 15 7.5 40-35 6 15 92.00 66.0	3618	43619	2.5	60	30	2.5-2.1	6	15	92.00	96.00
3824         43625         200         1.5         .76         200-165         1         10         10.00         14.0           3826         43627         150         2         1         165-125         1         10         10.00         14.0           3829         43629         120         2.5         1.25         125-100         1         12         14.00         18.0           3830         43631         100         3         1.5         100-85         1         12         14.00         18.0           3834         43635         60         5         2.5         63-50         1         15         17.00         21.0           3836         43637         48         6.3         3.2         50-40         1         15         17.00         21.0           3836         43637         48         6.3         3.2         50-40         1         15         17.00         21.0           3848         43639         37.5         8         4         40-30         2         12         26.00         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0					250					
3830	3620 13622 1 <b>3624</b>	43623	240	1.25	.63	300-250 250-200 200-165	1	10	10.00	\$14.00 14.00 14.00
1834       43635       60       5       2.5       63-50       1       15       17.00       21.0         1838       43637       48       6.3       3.2       50-40       1       15       17.00       21.0         1848       43639       37.5       8       4       40-30       2       12       26.00       30.0         1842       43641       30       10       5       30-25       2       15       31.00       35.0         1844       43645       20       15       7.5       20-16.5       3       15       46.00       50.0         1844       43645       20       15       7.5       20-16.5       3       15       46.00       50.0         1846       43649       12       25       12.5       12.5-10       5       15       78.00       82.0         1850       43651       10       30       15       10-8.3       6       15       92.00       96.0         550 Volts         1844       49145       1600       .7       .38       830-700       1       15       \$17.00       \$21.0         148       49149	36 <b>26</b> 3628 3630	43629	120	2.5	1.25	165-125 125-100 100- 85	1	12	14.00	14.00 18.00 18.00
1840         43641         30         10         5         30-25         2         15         31.00         35.00           1842         43643         25         12.5         6.3         25-20         2         15         31.00         35.0           1844         43845         20         15         7.5         20-16.5         3         15         46.00         50.0           1846         43849         12         25         12.5         12.5         12.5-10         5         15         62.00         66.0           550 Volts           5144         49145         2000         .6         .3         1000-830         1         15         \$17.00         \$21.0           1246         49147         1600         .7         .35         830-700         1         15         \$17.00         \$21.0 <th< td=""><td>3632 3634 3636</td><td>43635</td><td>60</td><td>5</td><td>2.5</td><td>63-50</td><td>1</td><td>15</td><td>17.00</td><td>18.00 21.00 21.00</td></th<>	3632 3634 3636	43635	60	5	2.5	63-50	1	15	17.00	18.00 21.00 21.00
1646	3638 3640 3642	43641	30	10	5	30-25	2	15	31.00	30.00 35.00 35.00
144	3644 3646 3648	43647	15	20	10	16.5-12.5	4	15	62.00	50.00 66.00 82.00
1144         49145         2000         .6         .3         1000-830         1         15         \$17.00         \$21.0           148         49147         1800         .7         .35         830-700         1         15         17.00         21.0           148         49149         1300         .76         .38         700-850         1         15         17.00         21.0           150         49151         1000         .84         .40         650-600         1         12         14.00         18.0           162         49153         800         .9         .45         600-550         1         12         14.00         18.0           852         43653         600         1         .5         550-500         1         10         10.00         14.0           854         43655         480         1.25         .63         500-400         1         10         10.00         14.0           856         43657         400         1.5         .75         400-330         1         12         14.00         18.0           858         43669         300         2         1         330-250         1	3650	43651	10	30		·	6	15	92.00	96.00
1146         49147         1600         .7         .35         830-700         1         15         17.00         21.00           1248         49149         1300         .76         .38         700-650         1         15         17.00         21.00           150         49151         1000         .84         .40         650-600         1         12         14.00         18.0           152         49153         800         .9         .45         600-550         1         12         14.00         18.0           852         43653         800         1         .5         550-500         1         10         10.00         14.0           854         43655         480         1.25         .63         500-400         1         10         10.00         18.0           854         43657         400         1.5         .75         400-330         1         12         14.00         18.0           858         43659         300         2         1         30-250         1         12         14.00         18.0           858         43661         250         2.5         1.25         250-200         1	N114	40145	2000							
150.         49151         1000         .84         .40         650-600         1         12         14.00         18.0           152.         49153         800         .9         .45         600-550         1         12         14.00         18.0           6852         43653         600         1         .5         550-500         1         10         10.00         14.0           654         43655         480         1.25         .63         500-400         1         10         10.00         18.0           656         43657         400         1.5         .75         400-330         1         12         14.00         18.0           658         43659         300         2         1         330-250         1         12         14.00         18.0           659         43663         200         3         1.55         250-200         1         15         17.00         21.0           662         43663         200         3         1.55         200-165         1         15         17.00         21.0           664         43665         150         4         2         165-125         2         1	9146 9146			.7	.35	830-700	i	15 15		\$21.00 21.00
654         43655         480         1.25         63         500-400         1         10         10.00         18.0           656         43657         400         1.5         .75         400-330         1         12         14.00         18.0           658         43659         300         2         1         330-250         1         15         17.00         18.0           660         43661         250         2.5         1.25         250-200         1         15         17.00         21.0           662         43663         200         3         1.5         200-165         1         15         17.00         21.0           664         43665         150         4         2         165-125         2         12         26.00         30.0           668         43669         100         6         3         100-85         2         15         31.00         35.0           679         43671         82         7.5         3.8         85-65         3         15         46.00         50.0           674         43675         50         12.5         6.3         50-40         5         15	9148 9150 9152	49151	1000	.84	.40	650-600	1	12	14.00	21.00 18.00 18.00
660         43661         250         2.5         1.25         250-200         1         15         17.00         21.0           662         43663         200         3         1.5         200-165         1         15         17.00         21.0           664         43665         150         4         2         165-125         2         12         26.00         30.0           665         43669         100         6         3         100-85         2         15         31.00         35.0           679         43671         82         7.5         3.8         85-65         3         15         46.00         50.0           674         43675         50         12.5         6.3         50-40         5         15         78.00         82.0           878         43677         40         15         7.5         40-35         6         15         92.00         96.0	3652 3654 3656	43655	480		.63	500-400	i	10	10.00	14.00 18.00 18.00
666.         43667         125         5         2.5         125-100         2         15         31.00         35.0           688.         43669         100         6         3         100-85         2         15         31.00         35.0           679.         43671         82         7.5         3.8         85-65         3         15         46.00         50.0           574.         43673         60         10         5         65-50         4         15         62.00         66.0           674.         43675         50         12.5         6.3         50-40         5         15         78.00         82.0           876.         43677         40         15         7.5         40-35         6         15         92.00         96.0	3658 3669 3662	43661	250	2.5	1.25	250-200	l i	15	17.00	18.00 21.00 / 21.00
632     43673     60     10     5     65-50     4     15     62.00     66.0       674     43675     50     12.5     6.3     50-40     5     15     78.00     82.0       826:     43677     40     15     7.5     40-35     6     15     92.00     96.0	166 <u>4</u> 1666 1668	43667	125	5	2.5	125-100	2	15	31.00	30.00 35.00 35.00
	1679 1672 1674	43673	60	10	5	65-50	4	15	62.00	50.00 66.00 82.00
	676	43677	40	15	7.5	40-35	6	15	92.00	96.00

The above prices cover rheostats with black polished handwheel.

A polished cast brass handwheel (List No. 59286) can be furnished with CR-8001 back of panel field rheostats instead of the polished black handwheel, at an additional list price of \$9.24.

ORDERING DIRECTIONS

Rheostats should be ordered by List No. If front of the board mounting is wanted, call for CR-8000. If back of the board mounting is wanted, call for CR-8001.

Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house by

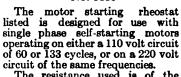
No. 9110 A. C. Single Phase

Motor Starter

## C-H. MOTOR STARTERS

## FOR ALTERNATING CURRENT **MOTORS**





The resistance used is of the ventilated tubular type, and is so arranged as to eliminate the effect of inductance and consequently to provide the highest possible power factor obtainable in starters of this type.



No. 3110 Speed Regulator, No-Voltage Release

## A.C. Single Phase Motor Starters Without Automatic No-voltage Release No. 9110

	For	25 and 60 C	ycle	For 133 Cycle					
H.P.	110 Volts List Price	Style	220 Volts List Price	Style	110 Volts List Price	Style	220 Volts List Price	Style	
1	\$14.00	A	\$14.00	A	\$16.00	A	\$16.00	A	
2	16.00	A	16.00	A	26.00	В	16.00	A	
3	28.00	В	16.00	A	28.00	В	28.00	В	
4	28.00	В	28.00	В	32.00	C	28.00	В	
5	32.00	В	28.00	В	46.00	C	32.00	В	
71/2	46.00	C	32.00	В	52.00	C	36.00	В	
10	52.00	C	36.00	В	54.00	C	48.00	C	
$12\frac{1}{2}$	54.00	C	48.00	C	84.00	D	52.00	C	
15	84.00	D	54.00	C	84.00	D	72.00	CD	
20	84.00	D	72.00	CD	164.00	MS	72.00	CD	
25	160.00	MS	72.00	CD	164.00	MS	84.00	D	
30	164.00	MS	84.00	D					
35	164.00	MS	84.00	D					
40			88.00	D					

On 25 and 60 cycle starters only the no-voltage release feature can be supplied at the following prices:

Type A\$14.00 list	Type CD\$18.00 list
Type B	Type D
Type B         14.00 list           Type C         18.00 list	Type MS 44.00 list
2,700 2	1 2 y po 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Prices will be quoted on application for Starters for 440-550 volts.

## D.C. Motor Speed Regulators, with No-voltage Release No. 3110

	115	Volts	230	Volts	500 V	olts
H.P.	Ventilating Fan Type List Price	Machine Type List Price	Ventilating Fan Type List Price	Machine Type List Price	Ventilating Fan Type List Price	Machine Type List Price
1/4	\$22.00	\$22.00	\$24.00	\$22.00	\$24.00	\$24.0
1/2	24.00	24.00	26.00	24.00	26.00	26.0
1	28.00	40.00	28.00	40.00	28.00	40.0
2	44.00	56.00	44.00	56.00	44.00	56.0
3	56.00	66.00	56.00	66.00	56.00	66.0
5	84.00	90.00	84.00	112.00	112.00	112.0
71/2	112.00	112.00	112.00	138.00	134.00	138.0
10	144.00	114.00	114.00	. 154.00	168.00	190.0
15	200.00	200.00	178.00	178.00	222.00	244.0
20	234.00	256.00	200.00	222.00	244.00	268.0
25	300.00	300.00	490.00	292.00	288.00	290.0
30	334.00	334.00	312.00	312.00	312.00	312.0
35	400.00		400.00	400.00	400.00	400.0
10			444.00	444.00	444.00	444.0
50			556.00	556.00	556.00	556.0

Delivery F. O. B. Factory, Milwaukee, Wis. For warehouse deliveries write nearest house.

# C-H. SPEED REGULATORS FOR ALTERNATING CURRENT MOTORS





No. 9320 A. C. Polyphase Motor Speed Regulator

## 6 Inch Speed Regulator—D. C.

These 6-inch Speed Regulators are for use as a means of varying the speed of small motors, such as are now employed for operating small blowers, fans, buffers, adding and copying machines, jewelers' and dentists' lathes and drills, sewing machines, washing machines, etc.

The operation is by means of a simple sliding lever, seven contacts being provided. If the first contact is an "off" or open point, the motor will be started on the second contact, giving six running positions. Without an "off" point there are seven running positions with six possible speed changes. The resistance is moisture-proof and dust-proof, the resistor wire being wound on a flat porcelain core and imbedded in a special cement.

These devices are also used as field regulators, dimmers for lighting circuits, heating coil regulators, in connection with plating baths, etc.

The limitations in standard design are as follows: Maximum watt capacity, 125. Maximum resistance per step, 150 ohms. Maximum amperes, 10. Maximum voltage of circuit, 250. Net weight, 3 pounds. Diameter 6 inches. Height of casting 1% inches.

Resistances higher than 150 ohms per step furnished at advanced price.

List Price Each

6-inch Speed Regulator,  $\frac{1}{16}$  H.P.,  $\frac{1}{16}$  H.P.,  $\frac{1}{12}$  H.P.,  $\frac{1}{16}$  H.P.,  $\frac{1}{16}$  H.P.,  $\frac{1}{16}$  H.P.,  $\frac{1}{16}$  H.P., and  $\frac{1}{16}$  H.P. \$5.30 When ordering specify size and voltage desired and whether for compound or machine type load.

# SPEED REGULATORS FOR ALTERNATING CURRENT SLIP RING MOTORS No. 9320

	H.P.	Weight Lbs. Boxed	List Price Each	H.P.	Weight Lbs. Boxed	List Price Each
1 1/2 2 1/2 3 4	Plate type Type A	25 25 25 25 25 25 30 35 45 50 75	\$36.00 36.00 32.00 34.00 36.00 42.00 54.00 66.00 72.00 78.00 82.00	4 5 7½ 10 15 20 25 30 35 20 25	140 150 165 190 225 250 275 300 330 275 300	\$122.00 128.00 140.00 140.00 148.00 • 178.00 206.00 294.00 320.00 222.00 254.00
4 5 2 2 <sup>1</sup> / <sub>2</sub> 3 3 <sup>1</sup> / <sub>2</sub> 4 5 7 <sup>1</sup> / <sub>2</sub> 10 15	Туре АВ	100 60 65 70 90 90 100 130 150	88.00 96.00 96.00 96.00 98.00 98.00 104.00 108.00 128.00 134.00	30 35 40 50 60 75 1 1 1 1 1 1 1 1 1 1	300 375 450 525 600 650	340.00 376.00 382.00 432.00 476.00 512.00

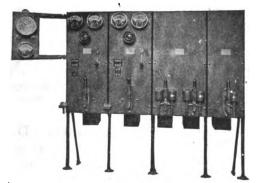
Note: Full load rotor current per ring must not exceed: 6 amperes for plate type or 20 amperes for type (A), for 280 volts; 40 amperes for type (AB), for 320 volts; 75 amperes for type (B), for 320 volts; 150 amperes for type (C), for 400 volts.

Delivery: F. O. B. Factory, Milwaukee, Wis. For warehouse deliveries write nearest house.

## STANDARD UNIT SWITCHBOARDS



Generator Panels Up to 640 Kw.



480 and 600 Volt Separate and Combination [Generator and Feeder Panel



Separate and Combination Generator and Feeder Panels

SWITCHBOARD requirements for most small plants have many details in common which permit them to be standardized, reducing initial costs and increasing operating efficiencies.

The Western Electric standard switchboards present in compact and convenient form a complete series of fully equipped panels, which can be used separately, or combined to suit the needs of the growing plants.

Standardization in the case of these units benefits the user by reducing manufacturing costs, saving time in preliminary details and in shipment and in simplifying future extensions.

The line includes two classes of panels, 76 inches high and 90 inches high, each complete in itself, but designed for future joining to other of these standard units. The types comprise generator panels, combination generator and feeder panels, feeder panels for single, two and three phase circuits, exciter panels and series are panels.

All standard panels are of dull black marine finished slate, 1½ inches thick, but other materials and thicknesses are supplied when desired.

The framework is of 1½ inch pipe with necessary fittings, furnishing a complete and sturdy support. Ample bus bar capacity in 2 inch by ½ inch copper bar is provided but not listed, as the individual requirements will vary. If required, 0000 B. & S. insulated wire may be substituted where the capacity does not exceed 200 amperes alternating current.

All instruments are operated from the secondaries of current and potential transformers included with the panels.

The oil switches are simple, compact and reliable, having quick positive action, liberal air and oil space and are readily accessible for inspection.

These panels may be used for any frequency from 25 to 60 cycles, but will be furnished for 60 cycles unless otherwise ordered.



Series Arc Panel 1190 and 2200 Volta

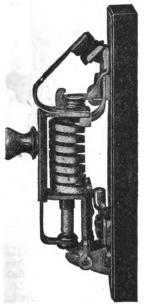


Three Phase Panel 1150-2300 Volta

### G. E. CIRCUIT BREAKERS

## Automatic Circuit Breakers (Overload)

### CARBON BREAK, TYPE C, FORM Q, DIRECT AND ALTERNATING CURRENT



Direct Current, Type C, Form Q Overload Circuit Breaker

The Type C, Form Q circuit breaker has been designed to meet the demand for a compact, single pole breaker of low price, for the automatic protection of small capacity motor, lighting and heating circuits and

It is made in the front-connected, single pole form only, for use on direct current and alternating current circuits of 250 volts or less, and is mounted on a natural black slate base 81/2 inches long, 23/4 inches wide

and 34 inch thick.

These circuit breakers are quick-acting, of rugged construction and the temperature rise will not exceed 28 degrees C. at rated full load current. The main contacts are of the laminated brush type. Heavy carbon secondary contacts on suitable spring supports are provided to prevent injury to the main contacts. The secondary contacts may be easily replaced when necessary. Two cable terminals are furnished with each circuit breaker.

The tripping mechanism consists of a plunger actuated by a series coil and arranged to deliver a "hammer blow" to the latch which holds the breaker closed. Once the plunger commences to move, the pull continually increases and the tripping action is therefore absolutely posi-tive. An insulated button is provided on the latch for hand operation,

and this latch, as well as the catch, are of hardened steel.

The calibrating device is insulated from the live metal parts of the breaker and is locked in position. To adjust the tripping point, loosen the calibrating arm by giving the handle a half turn to the left, then raise or lower the arm until the proper line on the scale appears opposite the line on the name plate. Lock the calibrating arm in position by giving the handle a half turn to the right.

All live metal parts have bright copper finish, insulated parts, black

oxidized.

These breakers will stand a high potential test between circuit breaker and ground of about five times their normal voltage rating.

## Type C, Form Q, Carbon Break-Direct and Alternating Current Overload, 250 Volts

#### DIRECT CURRENT, SINGLE POLE, 250 VOLTS OR LESS

List No.	Ampere Capacity	Calibration Minimum	Maximum	List Price Each
75337	3	1.5	<sup>*</sup> 5	<b>\$</b> 15.14
75338	5	3	8	15.14
75339	10	5	15	15.14
75340	. 15	10	25	<b>1</b> 5.14
75341	30	15	45	<b>15</b> .14
75342	60	30	90	17.16
75343	100	60	150	17.16

#### ALTERNATING CURRENT, SINGLE POLE, 250 VOLTS

76794		3	2	5 .	\$17.16
76795		5	$ar{4}$	8	17.16
76796		10	8	15	17.16
76797	•	15	12	25	17.16
76798		30	25	45	17.16
76790		60	45	90	18.60
76800		100	80	. <b>150</b> ,	18.60

Note: Approximate shipping weight is 4 lbs.

These breakers can be furnished back connected for mounting on 11/4 inch base or panel. When so furnished, breakers are shipped mounted on wooden templates. For back connection add \$1.43 to above list prices.

"Ampere Capacity" denotes the load that the breaker will carry continuously without excessive

Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write hearest house.

## G. E. CIRCUIT BREAKERS







200 Amperes, 500 Volts, DP Underload

Double Pole, 500 Volts

## Type C, Form G, Carbon Break-Direct Current-Overload

Recommended for small panels for motor control, mercury rectifiers, etc.

Single Pole, 500 Volts or Less Double Pole, 250 Volts List No. List No. Calibration Back Back Amp. Front List Front List Connected Connected Capac-Con-Price Con-Price for 1½ In. or 2 In. for 11/2 In. nected ity . Each nected Each or 2 In. Min. Max. on Base on Base Panel Panel 3 39899 39911 \$24.30 39898 39910 \$32.90 39915 24.30 39902 32.90 5 3 39903 39914 24.30 10 5 15 39907 39919 39906 39918 32.90 32.90 25 35507 24.30 15 10 35483 35482 35506 40 24.30 25 15 35487 35511 35486 35510 32.9050 25 75 35491 35515 24.3) 35490 35514 32.90 100 50 150 35495 35519 28.60 35494 35518 40.04 200 100 300 35499 35523 38.60 35498 35522 55.78 300 200 450 35503 35527 48.62 35502 35526 65.75

					Bousie I die, doo Toles			
3	1.5	5	 	1	39900	39912	\$38.60	
5	3	8	 		39904	39916	38.60	
10	5	15	 		39908	39920	38.60	
15	10	25	 		35484	35508	38.60	
25	15	40	 		35488	35512	38.60	
50	25	75	 		35492	35516	. 38.60	
100	50	150	 		35496	35520	45.76	
200	100	300	 		35500	35524	62.92	
300	200	450	 		35504	35528	72.94	

### Direct Current-Underload

Single Pole, 500 Volts or Less Double Pole, 250 Volts Double Pole, 500 Volts

Amp. Capacity	List No.			List No.			List No.		
	Front Con- nected on Base	Back Connect- ed for 1½ In. or 2 In. Panel	List Price Each	Front Con- nected On Base	Back Connect- ed for 1½ In. or 2 In. Panel	List Price Each	Front Con- nected On Base	Back Connect- ed for 1½ In. or 2 In. Panel	List Price Each
15	37493	37517	\$27.00	37492	37516	\$37.18	37494	37518	\$42.50
25	37497	37521	27.00	37496	37520	37.18	37498	37522	42.50
50	37501	37525	27.00	37500	37524	37.18	37502	37526	42.50
100	37505	37529	31.46	37504	37528	44.34	37506	37530	50.06
200	37509	37533	42.50	37508	37532	61.50	37510	37534	68.64
300	37513	37537	54:34	37512	37536	78.64	37514	37538	85.80

Note: Ampere capacity denotes the load that the breaker will carry continuously at 30 degrees C. rise or less. Underload breakers can be set to trip between the minimum limit of 10 per cent. and the minimum limit of 20 per cent. of their carrying capacity.

Type C, Form G, Carbon Break
DIRECT CURRENT—COMBINED OVERLOAD AND †UNDERLOAD Double Pole, 250 Volts Single Pole, 500 Volts or Less

			List	No.	1 11	Lis	1	
Amp. Capac-	Calibration		*Front	Back Connected	List Price	*Front Con-	Back Connected	List Price
îty		nected on Base	nected   10r 1½ In.		nected on Base	for 1½ In. or 2 In. Panel	Each	
15	10	25	77676	77688	\$51.48	77675	77687	\$51.48
25	15	40	77678	77690	51.48	77677	77689	51.48
50	25	75	77680	77692	51.48	77679	77691	51.48
100	50	150	77682	77694	60.06	77681	77693	60.04
200	100	300	77684	77696	81.50	77683	77695	81.50
300	200	450	77686	77698	102.96	77685	77697	102.96

Double Pole, 500 Volts

Manufacturers' No., list prices, etc., same as above. \*Each pole mounted on separate base. †Combination consists of one single pole overload and one single pole underload breaker. When used as single pole breaker, both breakers are connected in series. When used as double pole breaker, connect overload breaker in one side of line, underload in the other side.

Direct Current—Combined Overload and †Low Voltage Single Pole, 500 Volts or Less—Front Connected on 11/4 Inch Base Single Pole, 500 Volts or Less-Back Connected for 11/2 or 2 Inch Panel

	Calib	Calibration		**List No.		1	1	**List No.		**T :
Amp. Capac- ity	Min.   Max.   For   For   For   500   500   Volts   Volts   Volts   Volts	Price Each	For 125 Volts	For 250 Volts	For 500 Volts	**List Price Each				
3	1.5	- 5	77243	77245	77247	\$38.60	77297	77299	77301	\$38.60
5	3	8	77249	77251	77253	38.60	77303	77305	77307	38.60
10	5	15	77255	77256	77259	38.60	77309	77311	77313	38.60
15	10	25	77261	77263	77265	38.60	77315	77317	77319	38.60
25	15	40	77267	77269	77271	38.60	77321	77323	77325	38,60
50	25	75	77273	77275	77277	38.60	77327	77329	77331	38.60
100	50	150	77279	77281	77283	42.90	77333	77335	77337	42.90
200	100	300	77285	77287	77289	55.76	77339	77341	77343	55.76
300	200	450	77291	77293	77295	65.78	77345	77347	77349	65.78

Double Pole, 125 and 250 Volts-Front Connected on 11/4 Inch Base

Double Pole, 125 and 250 Volts—Back Connected for 11/2 or 2 Inch Panel

Amp. Capac- ity	Calibr	Calibration		**List No.		**List	**List	
	Min.	Max.	For 125 Volts	For 250 Volts	**List Price Each	For 125 Volts	For 250 Volts	Price Each
3	1.5	5	77244	77246	\$47.20	77298	77300	\$47.20
5	3	8	77250	77252	47.20	77304	77306	47.20
10	5	15	77256	77258	47.20	77310	77312	47.20
15	10	25	77262	77264	47.20	77316	77318	47.20
25	15	40	77268	77270	47.20	77322	77324	47.20
50	25	75	77274	77276	47.20	77328	77330	47.20
100	50	150	77280	77282	54.34	77334	77336	54.34
200	100	300	77286	77288	72.94	77340	77342	72.94
300	200	450	77292	77294	82.94	77346	77348	82.94

Double Pole, 500 Volts-Back Connected Double Pole, 500 Volts-Front Connected for 11/2 or 2 Inch Panel on 11/4 Inch Base

Amp.	Calibrat	tion	**List No.	**List	**List No.	**List Price	
Capac- ity	Min.	Max.	for 500 Volts	Price Each	for 500 Volts	Each	
3	1.5	5	77248	\$52.90	77302	\$52.90	
5	3	8	77254	52.90	77308	52.90	
10	5	15	77260	52.90	77314	52.90	
15	10	25	77266	52.90	77320	52.90	
25	15	40	77272	52.90	77326	52.90	
50	25	75	77278	52.90	77332	52.90	
100	50	150	77284	60.06	77338	60.06	
200	100	300	77290	80.08	77344	80.08	
300	200	450	77296	90.10	77350	90.10	

Note: Ampere capacity denotes the load that the breaker will carry continuously at 30 degrees C. rise or less. For alternating current prices refer to lists of overload breakers and attachments.

\*\*Manufacturer's No. and list price includes series resistance for low voltage coil.

†Low voltage releases at approximately one-half rated voltage: Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries, write nearest house. 18

# Type C, Form G, Carbon Break-Direct Current

# PLAIN SHUNT TRIP, WITH CIRCUIT OPENING AUXILIARY SWITCH

Single Pole, 500 Volts or Less

Tie	t No.	_	·			
Front Connected	Back Connected for 1½ In.	Back Connected for 2 In.	ampere	. Wt.	x. Ship.	List Price
On Base	Panel	Panel	Capacity	On Base	For Panel	Each
77164 77168 77172	77176 77180 77184	77188 77192 77196	100 200 300	20 32 32	12 20 20	\$32.90 42.90 53.10
		Double	e Pole, 250 Vol	ts		
77163 77167 77171	77175 77179 77183	77187 77191 77195	100 200 300	25 48 48	15 32 32	\$24.34 60.06 70.08
		Double	e Pole, 500 Vol	ts		*
77165 77169 77173	77177 77181 77185	77189 77193 77197	100 200 300	25 48 <del>4</del> 8	15 32 32	\$50.06 67.20 77.22

Note: No overload coils on these breakers.

# OVERLOAD AND SHUNT TRIP, WITH CIRCUIT OPENING AUXILIARY SWITCH Single Pole, 500 Volts or Less

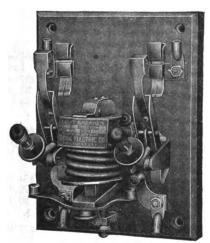
List	t No.					•		
	Back	Back					r. Ship.	
Front	Connected	Connected	A	0-11-		Wt.,		Tin Dia
Connected	for 1½ In.	for 2 In.	Ampere	Calibr		On	For	List Price
On Base	Panel	Panel	Capacity	Min.	Max.	Base	Panel	Each
77461	77497	77533	3	1.5	5	25	15	<b>\$40.04</b>
77465	77501	77537	.5	3	.8	25	15	40.04
77469	77505	77541	10	5	<b>15</b> .	25	15	40.04
77473	77509	77545	15	10	25	25	15	40.04
77477	<b>7</b> 7513	77549	25	15	40	25	15	40.04
77481	77517	77553	50	25	75	25	15	40.04
77485	77521	<b>7</b> 7557	100	50	150	25	15	<b>4</b> 4.34
77489	7752 <b>5</b>	77561	200	100	300	40	30	54.34
77493	77529	<b>7</b> 7565	300	200	450	40	30	64.36
			Double Po	le, 250 Volt	:8			
77460	77496	77532	3	1.5	5	30	20	\$48.62
77464	77500	77536	5	3	8	30	20	48.62
77468	77504	77540	1Ŏ	5	15	30	20	48.62
77472	77508	77544	15	10	25	30	20	48.62
77476	77512	77548	25	15	40	30	20	48.62
77480	<b>7</b> 751 <b>6</b>	77552	<b>5</b> 0	25	75	30	20	48,62
77484	77520	77556	100	50	150	30	20	55.78
77488	77524	77560	200	100	300	55	40	71.50
77492	77528	77564	300	200	450	55	40	81.50
					,			
				le, 500 Volt				
77462	77498	77534	· 3	1.5	5	35	20	<b>\$</b> 54.34
77466	<b>77502</b>	77538	5	3	8.	<b>3</b> 5	20	54.34
77470	77506	77542	10	5	15	<b>35</b> .	20	54.34
77474	77510	77546	15	10	25	35	20	54.34
77478	77514	77550	25 ·	15	. 40	<b>35</b>	20	54.34
77482	77518	77554	50	<b>2</b> 5	75	35	. 20	54.34
77486	77522	<b>7</b> 7558	100	50	150	35	20	61.50
77490	77526	<b>7</b> 756 <b>2</b>	200	100	300	60	40	78.66
77494	77530	77566	300	200	450	60	40	88.66
Note	Ampere cap	acity denotes t	he load that	the breaker	will carry	continuou	slv at 30	

Note: Ampere capacity denotes the load that the breaker will carry continuously at 30 degrees C. rise or less. Capacities below 100 amperes, same price.

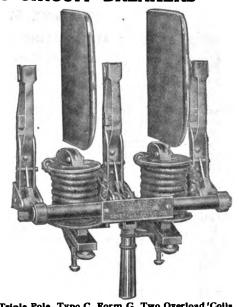
Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house.

11 16 15

# G. E. ALTERNATING CURRENT CIRCUIT BREAKERS







Triple Pole, Type C, Form G, Two Overload 'Coils

Type C.	Form	G.	Carbon	Breaker
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		. <b></b> .	he c, r	Carbon	1 Dieakei				
	Sir	igle Pole	, 600 Volts	or Less		Double Pole, 250 Volta			
			Lig	t No.		List	No.		
				Back			Back		
			Front	Connected		Front	Connected		
			Con-	for 1½ In.	List	Con-	for 1½ In.	List	
Ampere		ration	nected	or 2 In.	Price	nected	or 2 In.	Price	
Capacity	Min.	Max.	on Base	Panel	Each	on Base	Panel	Each	
3	1.5	5	43340	43352	<b>\$27.18</b>	43339	43351	<b>\$37.</b> 18	
5	3	8	43344	43356	<b>27</b> .18	43343	43355	<b>37</b> .18	
10	5	15	43348	43360	27.18	43347	43359	<b>37.</b> 18	
15	10	25	38144	38168	27.18	38143	38167	37.18	
25	15	40	38148	38172	<b>27</b> .18	38147	38171	37.18	
50	25	75	38152	38176	27.18	38151	38175	37.18	
100	50	150	38156	38180	31.46	38155	38179	44.34	
200	100	300	38160	38184	42.90	38159	38183	61.50	
300	200	450	38164	<b>3</b> 81 <b>8</b> 8	54.34	38163	38187	<b>78.6</b> 6	
De	ouble Pol	e, 600 Vo	lts, One Ov	verload Coil	Only	T. P. 600 Vo	lts, One Overload	l Coil Only	
3	1.5	5	43341	43353	<b>\$</b> 42.90	46271	46280	<b>\$61.50</b>	
5	3	8	43345	43357	42.90	46272	46281	61.50	
10	5	15	43349	43361	42.90	46273	46282	61.50	
15	10	25	38145	38169	42.90	38196	40322	61.50	
25	15	40	38149	38173	42.90	38197	40323	61.50	
50	25	75	38153	38177	42.90	38198	40324	61.50	
100	50	150	38157	38181	<b>50.06</b>	38199	40325	72.94	
200	100	300	38161	38185	68.64	38200	40326	98.68	
300	200	450	38165	38189	<b>85</b> .80	J 38201	40327	<b>122</b> .98	
							, 600 Volts, 25-40-		
Tri	ple Pole, (	600 Volts	, Two Ove	rload Coils	Only	One Overlo	oad and One Lo Coil	w Voltage	
3	1.5	. 5	46268	46277	\$72.94	46274	46283	\$81,50	
5	3	8	46269	46278	72.94	46275	46284	81.50	
10	5	15	46270	46279	72.94	46276	46285	81.50	
15	10	25	38190	38214	72.94 72.94	38202	38220	81.50	
25	15	· 40	38191	38215	72.94	38203	38221	81.50	
<b>5</b> 0	25	75	38192	38216	72.94	38204	38222	81.50	
100	50 50	150	38193	38217	84.38	38205	38223	92.96	
200	100	300	38194	38218	114.40	38206	38224	121.56	
300	200	450	38195	38219	143.00	38207	38225	145.86	
	200	100.	, 00100	00410		1 00001		, 10,00	

NOTE: Ampere capacity denotes the load that the breakers will carry continuously at 30 degrees C. rise or less.

Use one overload coil on balanced circuits; two overload coils on unbalanced circuits.

Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries, write nearest house.

Protective Apparatus and Switchboard Accessories

# G. E. CIRCUIT BREAKERS Type C, Form G, Carbon Break

#### ALTERNATING CURRENT—PLAIN SHUNT TRIP

With Circuit Opening Auxiliary Switch Single Pole, 600 Volts or Less

	††List No. Back	Back				
Front	Connected	Connected		Approx. Sh	nip. Wt. Lbs.	
Connected	for 11/2 In.	for 2 In.	Ampere	On	For-	††List Price
on Base	Panel	Panel	Capacity	Base	Panel	Each
77200	77212	77224	100	20	12	\$37.56
77204	77216	77228	200	32	20	47.20
77208	77220	77232	300	32	20	58.64
		Doul	ble Pole, 250 Vol	ts		
77199	77211	77223	100	25	15	· <b>\$48</b> .62
77203	77215	77227	200	48	32	65.78
77207	77219	77231	300	48	32	82.94
		Doub	ole Pole, 600 Vol	ts		
77201	<b>7</b> 7213	77225	100	25	15	<b>\$54</b> .34
77205	77217	77229	200	48 -	32	72.40
77209	77221	77233	<b>300</b>	48	32	90.10
		Trip	le Pole, 600 Vol	ts		
77234	77237	77240	100	40	30	\$77.22
77235	77238	77241	200	65	50	102.80
77236	77239	77242	300	65	50	127.28

Direct and Alternating Current Attachments-Auxiliary Switches

Circuit Closing		Circuit	Circuit Opening		Combined Circuit Opening and Circuit Closing		For Mounting	
List No.	List Price Each	List No.	List Price Each	List No.	List Price Each	Circuit Breaker	on	
37553	\$4.30	37547	\$4.30	37559	\$7.16	3-100	1¼ ins. Base	
37554	4.30	37548	4.30	37560	7.16	3-100	1½ ins. Panel	
37555	4.30	37549	4.30	37561	7.16	3-100	2 ins. Panel	
37556	4.30	37550	4.30	37562	7.16	200-300	1½ ins. Base	
37557	4.30	37551	4.30	37563	7.16	200-300	1½ ins. Panel	
37558	4.30	37552	4.30	37564	7.16	200-300	2 ins. Panel	

#### **†Shunt Trip Attachments**

·	Voltage	Desci Circui	List	
Mfr. No.	of	Ampere	Poles	Price
Attachment	Circuit	Capacity		Each
37545	125-250-500	3–100	Single and Double	\$11.44
37546	125-250-500	200–300	Single and Double	11.44

#### \*Low Voltage Release Attachments

——Alternating Current——		Direct Current						
List No. List		Voltage	Approx.		on of Circuit Breakers			
Attach-	Price	of	Releasing	Ampere				
ment	Each	Circuit	Voltage	Capacity	Poles			
43378	<b>\$20.02</b>	125	60	3-100	Single and Double			
43381	<b>22</b> . 88	125	60	200-300	Single and Double			
<b>4337</b> 9	20.02	250	125	3-100	Single and Double			
43382	<b>22</b> .88	250	125	200-300	Single and Double			
43380	20.02	500 (600)	250	3-100	Single and Double			
43383	22.88	500 (600)	250	200-300	Single and Double			

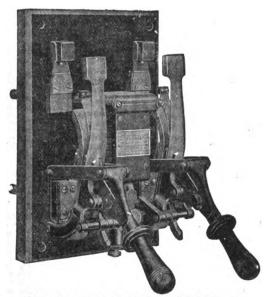
<sup>\*</sup>Release at one-half rated load.

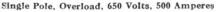
tShould be allowed to remain in circuit only momentarily.

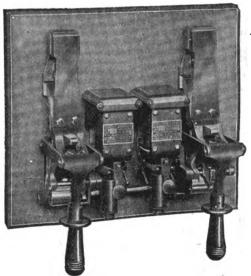
Same attachments with either single or double pole breakers.

Only one pole (the right hand from the front) is tripped out by these attachments.

††Mfr. No. and list price includes circuit opening auxiliary switch for opening shunt coil circuit. Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries, write nearest house.







Double Pole, Overload, 250 ts, 1200 Amperes

# Type C, Form P, Carbon Break

#### BACK CONNECTED DIRECT CURRENT—OVERLOAD

Recommended for general switchboard work. Main contact brushes are protected by carbon and metal secondaries. Contact pressure adjustable. Each breaker calibrated individually and has wide range of calibration, clearly marked. Double pole breakers, each pole separate handle; triple pole breakers, one handle for all poles and "trip-free" feature. Contact studs and blocks drop forged in one piece.

#### Single Pole-650 Volts or Less

# ;Double Pole—250 Volts (One Overload Coil)

			List	No.		List	No.	
				For 11/2 In.			For 11/2 In.	
*Amperc	Calib	ration	On 11/4 In.	or 2 In.	List Price	On 11/1 In.	or 2 In.	List Price
Capacity	Minimum	Maximum	Base	Panel	Each	Base	Panel	Each
15	10	25	36206	36233	\$57.20	36205	36232	\$82.94
25	15	4.5	36209	36236	57.20	36208	36235	82.94
50	25	7.5	36212	36239	57.20	36211	36238	82.94
100	50	150	36215	36242	60.01	36214	36241	<b>88</b> .66
200	100	300	36218	36245	75.80	36217	36244	111.54
<b>30</b> 0	200	450	36221	36248	90.00	36220	36247	134.42
<b>5</b> 00	300	<b>7</b> 50	36224	36251	120.12	36223	36250	183.04
<b>6</b> 00	400	900	†105 <b>72</b> 5	105731	135.86	†105724	105730	205.92
800	500	1200	† 36227	36251	164.46	† 36226	3625 <b>3</b>	<b>25</b> 1.68
1000	600	1500	<b>\\105728</b>	105734	194.48	†105 <b>727</b>	105 <b>733</b>	<b>300.3</b> 0
1200	800	1800	† 36230	36257	223.08	† 36229	3625 <b>6</b>	<b>34</b> 6.06

#### Double Pole, Double Coil, 250 Volts

## List No.

				For 11/2 In.	
*Ampere	Calib	ration	On 11/4 In.	or 2 In.	List Price
Capacity	Minimum	Maximum	Baso	Panel	Each
18	10	25	107088	107099	<b>\$1</b> 11.54
25	15	45	107089	107100	111.54
50	25	75	107090	107101	111.54
100	50	150	107091	107102	117.26
200	100	. 300	107092	107103	115.16
300	200	450	107093	107104	178.76
500	300	750	107094	107105	241.68
600	400	900	1107095	107106	274.40
800	500	1200	†107096	107107	<b>334</b> .62
1000	600	1500	†107097	07108	397.54
1200	800	1800	†107098	107109	457.60

#### NUTS AND TERMINALS

List prices include complete equipment of nuts and terminals for each stud.

\*Load which the breaker will carry continuously at 30 degrees C. rise or less.

† Mounted on 1½ inch base.

† Double pole, 650 volt breakers, prices on application, stating requirements.

Underload breakers may be set to trip between the limits of 10 per cent. and 20 per cent. of their rated amorre capacity.

Delivery F. O. B. Factory, Schenectady, N. Y. For war house deliveries write nearest house.

# Type C, Form P, Carbon Break—Direct Current—Underload

		BA	CK CONNECTE	ש		
	Single Pole,	650 Volts or Less		Double l	Pole, 250 Volts or L	-66
	Lis	t No.		Lia	st No.	
*Amp. Cap.	On 1¼ In. Base	For 1½ In. or 2 In. Panel	List Price Each	On 1¼ In. Base	For 1½ In. or 2 In. Panel	List Price Each
15	42076	42103	\$81.50	42075	42102	\$131.56
15 25	42079	42106	81.50	42078	42105	131.56
50	42082	42109	81.50	42081	42108	131.56
100	42085	42112	91.52	42084	42111	137.28
200	42088	42115	101.54	42087	42114	153.00
300	42091	42118	114.40	42090	42117	171.60
500	42094	42121	148.72	42093	42120	226.36
600	<b>†107012</b>	107018	168.74	†10 <b>7</b> 011	10701 <b>7</b>	255.98
800	† 42097	42124	204.50	† 42096	42123	302 . 60°
1000	107015	107021	243, 10	†107014	107020	374.66
1200	† 42100	42127	280.28	† 42099	42126	434.50

#### Overload and Underload—Direct Current

	Single Po	le, 650 Volts	or Less-Back	Connected		Double Pole,	250 Volts or I	_088 ·
			List N	o.		Li	st No.	
,				For 11/2 In.			For 1½ In.	
ımı		ration	On 11/4 In.	or 2 In.	List	On 11/4 In.	or 2 In.	List
Car	Min.	Max.	Base	Panel	Price	Base	Panel	Price
15	10	25	107024	107057	\$85.80	107023	107056	\$117.26
25	15	45	107027	107060	85.80	107026	107059	117 . 26
50	25	45 75	107030	107063	85.8 <b>0</b>	107029	107062	117.26
100	50	150	107033	107066	90.10	107032	107065	125.40
200	100	300	107036	107069	114.40	107035	107068	158.74
300	200	450	107039	107072	<b>13</b> 5. <b>86</b>	107038	107071	188.70
500	300	750	107042	107075	180.18	107041	1070 <b>74</b>	254 · 54
600	400	900	†107045	107078	204.50	107044	10707 <b>7</b>	286 00
80 <b>0</b>	500	1200	+107048	107081	247.40	†107047	10708 <b>0</b>	351.56
1000	600	1500	†107051	107084	291 . 7 <b>2</b>	†107050	107083	417.56
1200	800	1800	†107054	107087	334.62	†10705 <b>3</b>	10708 <b>6</b>	480.48
	Note: No relay	sused. Both	underload and ov	erload coils are	combined wi	th the breakers.		

# Direct Current-Shunt Trip, with Circuit Opening Auxiliary Switch

Used with Circuit Closing Relays, Speed Limit Devices, Push Button Control, Etc. Double Pole, 250 Volts Single Pole, 650 Volts or Less-Back Connected

*Amp.	On 11/4 In.	List No. For 1½ In.	For 2 In.	‡List Price	On 11/4 In.	List No. For 1½ In.	For 2 In.	‡List Price
Cap.	Base	Panel	Panel	Each	Base	Panel	Panel	Each
100	107292	107316	107340	\$68.64	107291	107315	107339	\$97.24
200	107295	107319	107343	84.38	107294	107318	107342	120.12
300	107298	107322	107346	98.68	107297	107321	107345	143.00
500	107301	107325	107349	128.70	107300	107324	107348	191.62
600	†10730 <del>4</del>	107328	107352	144 44	†107303	1073 <b>27</b>	10 <b>7352</b>	214.50
800	†107307	107331	107355	177.04	†107306	10733 <b>0</b>	107354	260.26
1000	†107310	107334	107358	203.06	†1073 <b>09</b>	10 <b>7</b> 33 <b>3</b>	10735 <b>7</b>	308.88
1200	†107313	107337	107361	231.66	†10731 <b>2</b>	107336	107360	354.64

# Direct Current—§Overload and Shunt Trip

With Circuit Opening Auxiliary Switch-Back Connected Used with Circuit Closing Relay, Speed Limit Device-Push Button Control

Single Pole, 650 Volts or Less

Double Pole, 250 Volts

	Calib	ration		‡List No.		1List			1List	
*Amp. Cap.	Min.	Max.	On 1¼ In. Base	For 1½ In. Panel	For 2 In. Panel	Price Each	On 1¼ In. Base	For 1½ In. Panel	For 2 In. Panel	Price: Each
15	10	25	105847	105880	105913	\$82.84	105846	105879	105912	\$108.68
25	15	40	105850	105883	105916	82.84	105849	105882	105915	108.68
50	25	75	105853	105886	105919	82.84	105852	105885	105918	108.68
100	50	150	105856	105889	105922	85.80	105855	105888	105921	114.40
200	100	300	105859	105892	105925	101.54	105858	105891	105924	139.28
300	200	450	105862	105895	105928	115.82	105861	105894	105927	160.16
500	300	750	105865	105898	105931	145.86	105864	105897	105930	208.78
600	400	900	†105868	105901	105934	161.60	†105867	105900 -	105933	231.66
800		1200	†105871	105904	105937	190.20	†105870	105903	105936	277.42
1000	600	1500	†105874	105907	105940	220.20	†105873	105906	105939	326.04
1200	800	1800	†105877	105910	105943	248.82	1105876	105909	105942	371.80

If the shunt trip coil is connected so that the trip coil circuit is opened when circuit breaker opens, the auxiliary switch will be omitted if so ordered. If omitted, deduct \$8.58 list.

#### **NUTS AND TERMINALS**

List Prices include complete equipment of nuts and terminals for each stud.

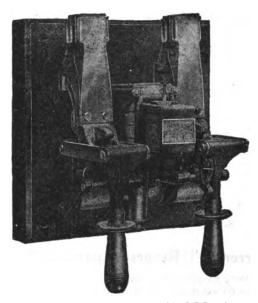
\*Load which the breaker will carry continuously at 30 degrees C. rise or less.

†Mounted on 1½ inch base.

IMfr. No. and list price include circuit opening auxiliary switch.

†Shunt trip coil should be left in circuit only momentarily.

Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house.



## TYPE C, FORM P, CARBON BREAK Direct Current—‡Overload and Low Voltage SINGLE POLE, 125, 250 or 650 VOLTS—BACK CONNECTED

Specify voltage desired. Mounted on 11/4 inch base.

Mounted on 11/4 Inch Base

Mounted on 1½ or 2 Inch Panel

*Ampere	Calib	ration	††List	† tList Price	List	List Price
Capacity	Minimum	Maximum	No.	Each	No.	Each
15	10	25	105739	\$77.22	105794	\$77.22
25	15	40	105744	77.22	105799	77.22
50	25	75	105749	77.22	105804	77.22
100		150	105754	80.08	105809	80.08
200		300.	105759	95.80	105814	95.80
300		450	105764	110.10	105819	110.10
500		750	105769	140.14	105824	140.14
600		900	†105774	155.86	105829	155.86
800		1200	†105779	184.48	105834	184.48
1000		1500	†105784	214.50	105839	214.50
1200		1800	†105789	243.10	105844	243.10

#### DOUBLE POLE—250 VOLTS OR LESS

For 11/2 Inch Base For 11/2 or 2 Inch Panel

ror 174 men Da	FOF 174 IIICH Dase					1 Of 172 Of 2 Initial Latter							
••	Calib	ration	††Li	st No.		††Li	st No.	††List					
*Ampere Capacity	Min.	Max.	For 125 Volts	For 250 Volts	††List Price Each	For 125 Volts	For 250 Volts	Price Each					
15	10	25	105736	105738	\$102.96	105791	105793	\$102.96					
<b>2</b> 5		10	105741	105743	102.96	105796	105798	102.96					
50	25	75	105746	105748	102.96	105801	105803	102.96					
100		150	105751	105753	137.28	105806	105808	108.68					
200	100	300	105756	105758	131.56	105811	105813	131.56					
300		450	105761	105763	154.00	105816	105818	154.08					
500	300	750·	105766	105768	203.06	105821	105823	203.06					
600	400	900	†105771	†105773	225.94	105826	105828	225.94					
800		1200	†105776	†105778	271.70	105831	105833	271.70					
1000		1500	†105781	†105783	320.32	105836	105838	320.32					
1200	800	1800	1105786	†105788	366.08	105841	105843	366.08					

#### **NUTS AND TERMINALS**

List prices include complete equipment of nuts and terminals for each stud.

\*Load which the breaker will carry continuously at 30 degrees C. rise or less.
†Mounted on 1½ inch base.
‡Releases at approximately one-half rated voltage.
†Include series resistance for low voltage coil.
Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house.



S. P.-500 Amperes, 650 Volts-Reverse Current

## Direct Current—††Reverse Current—Back Connected

Generally used for protecting generators, storage batteries and like service.

Reverse current feature does not operate on overload. Potential coil only in circuit while breaker is being closed, requires no exciting current in normal operation.

Is independent of voltage in operation and, consequently, not affected by low voltage conditions.

Single Pole-650 Volts or Less

Double Pole—250 Volts

*Amnere	0.13		List	No.	***	- List	No.	Tiet
*Ampere Capacity	7.234	Calibration		For 1½ In. or 2 In.	List Price	On 11/4 In.	For 1½ In. or 2 In.	List Price
	Minimum	Maximum	Base	Panel	Each	Base	Panel	Each
15			107112	107145	\$68.64	107111	107144	\$94.38
25	10.00	1	107115	107148	68.64	107114	107147	94.38
. 50	5%	20%	107118	107151	68.64	107117	107150	94.38
100	of	of	107121	107154	71.40	107120	107153	100.16
200	Rated	Rated	107124	107157	91.52	107123	107156	128.70
300	Ampere	Ampere	107127	107160	108.68	107126	107159	151.58
500	Capacity	Capacity	107130	107163	143.00	107129	107162	205.92
600	on	on	†107133	107166	162.02	†107132	107165	233.10
800	Reversal	Reversal	†107136	107169	197.34	†107135	107168	284.58
1000	2 4 40 3 10 4 2		†107139	107172	234.52	†107138	107171	338.90
1200	1000		†107142	107175	268.84	†107141	107174	273.00

#### Direct Current—‡Overload and Reverse Current—Back Connected

15	1 10	25	107178	107211	\$91.52	107177	107210	\$122.98
25	15	40	107181	107214	91.52	107180	107213	122.98
50	25	75	107184	107217	91.52	107183	107216	122.98
100	50	150	107187	107220	95.80	107186	107219	130.14
200	100	300	107190	107223	121.00	107189	107222	165.88
300	200	450	107193	107226	144.44	107192	107225	197.34
£00	300	750	107196	107229	167.40	107195	107228	265.98
€00	400	900	†107199	107232	217.36	†107198	107231	302.96
800	500	1200	†107202	107235	263.12	†107201	107234	366.08
1000	600	1500	†107205	107238	371.30	†107204	107237	437.58
1200	800	1800	†107208	107241	357.50	†107207	107240	571.30

#### **NUTS AND TERMINALS**

List prices include complete equipment of nuts and terminals for each stud.

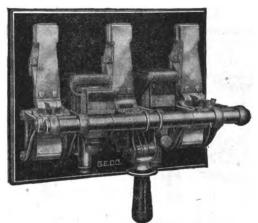
\*Load which the breaker will carry continuously at 30 degrees C. rise or less.

†Mounted on 1½ inch base.

‡Calibration of reverse current coil is from 5 per cent. to 20 per cent. of rated ampere capacity on reversal.

†No overload coil, operates on reversal only.

Delivery F. O. B. Factory, Schenectarly, N. Y. For warehouse deliveries write nearest house.



Triple Pole, Overload and Low Voltage Attachment

## Type C, Form P, Carbon Break

#### **Back Connected**

#### Alternating Current—††Shunt Trip with Circuit Opening Auxiliary Switch

\*Shunt trip breakers generally used for push button control or where it is desired to operate breaker by a limit switch. Also used in combination with relays.

Triple pole shunt trip breakers can be furnished for direct current. No extra charge when ordered for direct current.

Circuit opening auxiliary switch included may be omitted if breaker itself opens shunt trip circuit. Deduct \$8.58 list.

Triple Pole—480 Volts or Less

Triple Pole—650 Volts or Less

	‡List No.			#List			‡List	
*Ampere Capacity	On 1¼ In. Base	For 1½ In. Panel	For 2 In. Panel		On 1¼ In. Base	For 1¼ In. Panel	For 2 In. Panel	
100	114081 114683 114685 114687 †114689	114697 114699 114701 114703 114705	114713 114715 114717 114719 114721	\$174.46 194.78 220.22 270.26 286.86	114682 114684 114686 114688 †114690	114698 114700 114702 114704 114706	114716 114718 114720 114722	\$191.62 215.92 240.24 290.30 311.74
800 1000 1200	†114691 †114693 †114695	114707 114709 114711	114723 114725 114727	388.80 388.96 437.58	†114692 †114694 †114696	114708 114710 114712	114724 114726 114728	361.80 411.84 460.46

#### Single Pole—650 Volts or Less

#### Double Pole—480 Volts or Less

		List No.		1List		List No.		List
*Ampere Capacity	On 1¼ In. Base	For 1½ In. Panel	For 2 In. Panel		On 1¼ In. Base	For 1½ In. Panel	For 2 In. Panel	Price Each
100	114569 114572 114575 114578 †114581 †114584 †114587	114593 114596 114599 114602 114605 114608 114611	114617 114620 114623 114626 114629 114632 114635 114638	\$74.26 91.52 107.26 140.14 158.72 190.20 223.08 254.54	114568 114571 114574 114577 †114580 †114583 †114586 †114589	114592 114595 114598 114601 114604 114607 114610 114613	114616 114619 114622 114625 114628 114631 114634 114637	\$105.82 133.00 157.30 210.20 235.65 286.00 338.80 389.60

<sup>\*</sup>Load which the breaker will carry continuously at 30 degrees C. rise or less.

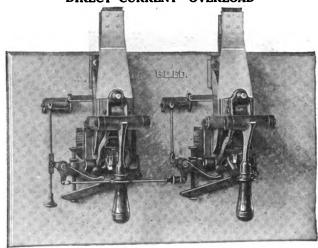
Mounted on 1½ inch base.

††Shunt trip coil should be left in circuit only momentarily.

Mfr. No. and list price include circuit opening auxiliary switch. If the shunt trip coil is connected so that the trip coil circuit is opened when circuit breaker opens, the auxiliary switch will be omitted, if so ordered. If omitted, deduct \$8.58 list.

Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house.

# G. E. CIRCUIT BREAKERS DIRECT CURRENT—OVERLOAD



Type C, Form K and K-2, Carbon Break
Type C, Form K—Single Pole, 250 Volts
Type C, Form K—Single Pole, 250 Volts
Type C, Form K-2—Single Pole, 650 Volts

Type C, Form K—Si	1	oration		t No.			t No.	
*Ampere	Can	паноц	For	For	List	For	For	List
Capacity	Min.	Max.	Mounting on 2 In. Panel	Mounting on 2½ In. Panel	Price Each	Mounting on 2 In. Panel	Mounting on 2½ In. Panel	Price Each
1500	1000	3000	115805		\$257.40	115087		\$286.00
2000	1200	4000	28921		314.60	104195		343.20
3000	1500	6000	104007		457.€0	104197		500.50
4000	2000	10000	28922		662.20	104198		723.80
6000	2000	15000	28923	28923	1001.00	104199	104199	1078.00
Type C, Form K-Dou	ble Pole	, 250 Vo	lts	‡Type C,	Form K-	2—Double	Pole, 65	0 Volts
1500	1000	3000	119863		\$540.54	119864		\$600.60
2000	1500	4000	104492		660.66	104497		720.72
3000	1200	6000	104994		960.96	104499		1051.06
4000	2000	10000	104495		1390.62			1519.98
6000	2000	15000		104496	2102.10		104501	2263.80

# Direct Current—Overload and Shunt Trip

Back Connected -Single Pole, 250 Volts or Less -Single Pole, 650 Volts Type C, Form K— Type C, Form K-2-1500..... 1000 3000 119871 **\$**283.14 119873 \$311.74 105714 1200 4000 105707 340.34 2000 . . . 368.94 1500 6000 105709 482.90 105716 3000. 526.2410000 105710 689.92 2000 105717 751.52 4000. 2000 105719 15000 105711 1028.72 105718 6000 . . . . . . .

# Direct Current—Overload and Low Voltage

Back Connected
Type C, Form K—Single Pole, 250 Volts or Less Type C, Form K-2—Single Pole, 650 Volts or Less

*4	Calib	ration		List No.		List Price		List No.		T :-4 T-:
*Amp. Cap.	Min.	Max.	For 125 Volt	For 250 Volt	For 650 Volt	1 - : 1	For 125 Volt	For 250 Volt	ror	List Price Each
1500	1000	3000	119867			\$280.28			119869	\$308.88
2000	1200	4000	104471	104472		337.48			<b>1044</b> 81	366.08
3000	1500	6000	104475						104483	523.38
4000		10000			• • • • •				104484	748.44
6000	2000	15000	104479	104480	• • • • •	1025.64				1102.64
		i .			ŀ	l				1464.24
		l					104489	104490	104491	1826.00

Thickness of panels for 1500 to 4000 ampere, 2 inches above 4000 ampere, 2½ inches. Prices of alternating current breakers with shunt trip attachment on application. Always specify frequency. List prices include complete sets of nuts for each stud, but no terminals.

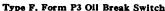
\*Load which the breaker will carry continuously at 30 degrees C. rise or less.

tRelease at approximately one-half rated voltage. Mfr. number and list price include series resistance for low voltage coil.

Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house.

### G. E. OIL BREAK SWITCHES









Type F, Form P6 Oil Break Switch

Package

Types F, Forms P3 and P6 Oil Switches

Type F, Forms P3 and P6 are designed specially for use in industrial plants in connection with induction motors of capacities not in excess of 25 horse power at 600 volts, or with normal current ratings not greater than 50 amperes at voltages less than 600. They are arranged for mounting directly on a wall, post, or where used with spinning frames in textile mills on the frame itself. When mounted on the spinning frame the switch is operated by a shipper rod. The live parts being entirely enclosed, the switches are particularly suitable for use in factories in which the air contains inflammable particles, or where explosive

The Type F, Form P6 Oil Switch is made automatic only.

The Type F, Form P6 Oil Switch is made automatic only.

The Type F, Form P7 Oil Switch is made automatic only.

The Type F, Form P8 Oil Switch is made automatic only. In the main these switches are similar and differ only in a few details.

cetails.

Capacities. These switches are made in the following capacities:
Type F, Form P3 non-automatic 600 volts, 50 amperes triple pole and four pole, single throw.
Type F, Form P6 automatic 600 volts, 50 amperes, triple pole, single throw.

# Type F, Form P3 Oil Break Switches FOR WALL MOUNTING (SPINNING FRAMES, MACHINE TOOLS, ETC.)

Non-automatic (Quick Make and Quick Break)

Ampere				Wt. Boxed	List	List
Capacity	Voltage	Rating	**Poles and Throw	in Lbs.	No.	Price
50	600	Motors of 25	T. P. S. T.	45	64063	\$32.00
50	600	h.p. or less	4 P. S. T.	50	64064	48.00

\*\*Include wooden handle and plate to adapt switch for hand operation. As switches are boxed with these parts included, no deduction can be made for their omission.

#### **GRAVITY CLOSED, DUST-PROOF CUTOUTS**

## (Without Fuses)

#### For Use With Type F, Form P3 Non-automatic Oil Switches Conduit Drilling

Amp. Cap. 30 30 31-60	Volt- age 600 600 600	Poles T. P. 4 P. T. P.	Top (Service) 1 % in. for 1 in. Conduit 1 % in. for 1 % in. Conduit 1 % in. for 1 % in. Conduit	Bottom (Feeder) 1½ in. for 1½ in. Conduit 2 in. for 1½ in. Conduit 2 in. for 1½ in. Conduit	List No. 48422 58441 48423	Quan- tity 25 25 25	List Price \$9.00 13.00 12.00
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These cutouts take N. E. C. Standard, 600 volt enclosed fuses.

#### Type F, Form P6 Oil Break Switches FOR WALL MOUNTING (SPINNING FRAMES, MACHINE TOOLS, ETC.)

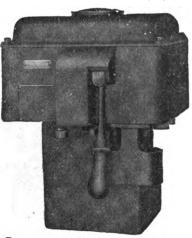
Ampere Capacity		Calibration		Approx. Shpg. Wt.	Quick Only (W Quick		Quick Make and Quick Break		
*Switch	†Series Coils‡	Min.	Max.	in Lbs.	List No.	List Price	List No.	List Price	
50 50 50 50	2	2	6	70	143104	\$64.00	143117	\$76.00	
50	3	3 -	9	<b>7</b> 0	143105	64.00	143118	76.00	
5U	6	6	12 18	70 70	143106 143107	64.00 64.00	143119 143120	76.00	
<b>5</b> U	0	О	1.9	70	143107	04.00	143120	76.00	
50	8	8	24	70	143108	64.00	143121	76.00	
50 50 50	1Ŏ	10	30	7ŏ	143109	64.00	143122	76.00	
50	īž	12	36	<b>7</b> Ŏ	143110	64.00	143123	76.00	
	15	16	48	70 70	143111	64.00	143124	76.00	
50	20	20	l 60 l	70	143112	64.00	143' 25	76.00	
50	20 25	25	75	70	143113	64.00	143126	76.00	
50	30 l	20 25 30	l 9ŏ l	70	143114	64.00	143127	76.00	
50 50 50 50	40	40	120	70	143115	64.00	1,3128	76.00	
50	50	50	150	70	143116	64.00	143129	76.00	

\*Load which the switch will carry continuously at 28 degrees C. rise or less.
†Load which the series trip coil will carry continuously at 28 degrees C. rise or less.

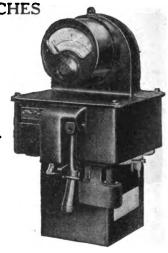
Coil will carry 25 per cent. overload for 2 hours at 45 degrees C. rise.

Thor use only in connection with three-phase induction motors of 25 horse power or less by Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house.

Western Electric
G. E. OIL BREAK SWITCHES



Form K-20 Oil Switch with Overload and Low Voltage Release



Form K-20 Oil Switch with Overload Low Voltage Release and Cover for Mounting R-6 Ammeter

# Type F Form K-20 Oil Break Switches

2500 VOLTS OR LESS
The Type F Form K-20 Oil Switch is designed especially for the protection of induction motors in industrial application. Switches are made single throw only and are for mounting on wall, post or flat surface.

		e Pole-S					Four I	ole-Sin	gle Thro	w	
	*Ampere	Capacity		Approx.	List		*Ampere	Capacity	G.E. Oil	Approx.	Li
List		†Series	No. 6	Ship. Wgt.	Price	List		†Series	No. 6	Ship. Wgt.	Pri
No.	Switch	Coils	in Gal.	in Lbs.	Each	No.	Switch	Coils	in Gal.		Eac
7373	60	2	2	145	\$78.00	167399	60	2	3	185	\$104.0
7374	60	3	2	145	78.00	167400	60	3	3	185	104.
7375	60	4	2	145	78.00	167401	60	4	3	185	104.
7376	60	6	2	145	78.00	167402	60	6	3	185	104.
737 <b>7</b>	60	8	2	145	78.00	167403	60	8	3	185	104
378	60	10	2	145	78.00	167404	60	10	3	185	104.
7379	60	12	2	145	78.00	167405	60	12	3	185	104.
380	60	16	2	145	78.00	167406	60	16	3	185	104.
381	60	20	2	145	78.00	167407	60	20	3	. 185	104.
382	60	25	2 ·	145	78.00	167408	60	25	3	185	104.
383	60	30	2	145	78.00	167409	60	30	3	185	104.
384	60	40	2	145	78.00	167410	60	40	3	185	104.
385	60	50	2	145	78.00	167411	60	50	3	185	104.
386	60	60	2	145	78.00	167412	60	60	3	185	104.
387	200	70	2	150	94.00	167413	200	70	3	195	124
388	200	80	2	150	94.00	167414	200	80	3	195	124
389	200	100	2	150	94.00	167415	200	100	3	195	124
390	200	125	2	150	94.00	167416	200	125	3	195	124
391	200	145	2	150	94.00	167417	200	145	3	195	124
392	200	160	2 2	150	94.00	167418	200	160	3	195	124
393	200	170	2	150	94.00	167419	200	170	3	195	124
394	200	200	2	150	94.00	167420	200	200	3	195	124
395	300	225	4	200	128.00						
396	300	250	4	200	128.00						• • • •
397	300	275	4	200	128.00						••••
398	300	300	4	200	128.00						• • • •

167426 1 <b>67427</b>	300 60–200	D and T Four	4 to 30	ю	60 60 Voltage Swi	16.00    16.00	<b>300</b> <b>60–20</b> 0		D and T Four	8.00 8.00
167425	60-200	D and T				14.00	60-200	) [	D and T	\$8.00
No.	Amperes	Poles	Ampero	: E	xtra	Each	Ampere		Poles	Each
List	For !	Switch .	Ammet		p. Wt.	Price	F	for Swi	teb	Price
			Mounts		prox.	List		•		List
	Swite		or Mounting			11		č	Gaskets	22.00
167424		2200		5-40		353146		ğ		24.00
167423		2200		60	,	353002		8		22.00
		350		40-60	- (					
167422		220 440		-40-60	} :	353001		6		18.00
		110		5-40 -40-60	. 1					
167421		110		60		none	•	3		\$10. <b>0</b> 0
No.		Volts	C	ycles	Spe	c. No.		Ext		Each
List			-Circuit-			Transform	er Ar		Vet Wt.	List Price
			LOW-VOL'	TAGE REL		ACHMEN				
167371	60	3	170	\$78.00	167372	200	2	3	180	\$96.00
20.501	500	-			Single Thre		,		200	30.00
167367	300	2	130	84.00	167370	300		í	185	96.00
167366	200	2	130	56.00	167369	200	5	5	135	66.00
167365	60	2	125	\$50.00	167368	Capac 60	ity in G	etts.	in Lbs.	Each \$52.00
List No.	*Ampere Capacity	in Gals.	Ship. Wt.	Price Each	List No.	*Ampe			Ship. Wt.	Price
7:-4	* 4	G.E.Oil No. 6	Approx.	List	* ***	41		.Oil	Approx.	List
	Double	Pole-Single		71.4		Trip	ole Pole	Single		
			N-AUTOMAT	ric (With	OUT OVER	RLOAD R		2.7.7.2		
167398	300	300 4	200	128.00					*****	
167397	300	275 4	200	128.00						
101980	300	250 4	200	128.00						

\*Load which the switch will carry continuously at 30 deg. C. rise or less.

†Series coils will carry 25 per cent. overload for two hours at 45 deg. C. rise or less.

Can be secured by combining proper low voltage release attachment with any switch listed above. Give List No. of both switch and low voltage release.

Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house.

## Western Electric G. E. OIL BREAK SWITCHES



Type F Form P-10 Oil Switch, 30 Amp., 600 Volt T.-P. S.-T. Automatic with Two Series I T L Overload Trip Coils

# Type F Form P-10 Oil Switches

30 Ampere 600 Volts or Less FOR INDUCTION MOTORS OF 10 H.P. OR LESS

These switches are especially adapted for the protection of small induction motors which can be thrown directly onto the line.

directly onto the line.

The Type F form P-10 switches are listed triple pole, single throw non-automatic. Automatic with double series inverse time limit overload trip; and plain low-voltage switches.

These switches are small, compact and inexpensive. Mechanical and electrical features are not surpassed by switches of larger size for motor protection. Although made largely from punchings, all parts are rugged and substantial, ensuring long life under severe operating conditions. All live parts are totally enclosed. Frame, oil vessels and calibrating features are practically dustproof.

The frame is provided with a large table a neglectly within the switch may be locked in the open position.

lug to take a padlock by which the switch may be locked in the open position.

Automatic switches trip free from handle and cannot be held on overload or short circuit or left in an intermediate position.

The handle follows the operation of the switch and the position of the switch contacts is indicated by on and off stamped on the frame.

The frame is arranged for mounting on any flat surface or

bracket and is held rigidly by two bolts.

The contact parts are insulated from ground and between phases by porcelain insulation, giving a higher

The contact parts are insulated from ground and between phases by porcelain insulation, giving a higher factor of safety and are constructed as a unit so that they may be removed easily from the frame or replaced. The switch is double-break, opening by gravity with speed augmented by springs on the mechanism. Contact fingers of the well-known K types are so constructed that the burning occurs on a surface other than

that used for contacting when the switch is in the closed position.

The mechanism is simple in construction. All parts held by lock washers, they are practically all made

from dies so that they are accurately interchangeable and repair parts can be easily installed. The switch frame is arranged to take either open or conduit wiring at right hand end of switch.

Automatic switches have series trip coils from 2 to 30 amperes and calibrating from normal to two times normal. These coils are assembled in pairs in a single piece, magnet frame complete with calibrating tubes and time limit features. These units are interchangeable for coils of all ratings. All coils are calibrated individually.

Triple Pole, Single Throw OLTS OR LESS

	Non-Au	tomatic Without Overload l	Release		
List	*Amp	ere Capacity	Approx.	List Price	
No.	Switch	Series Coils	Wgt.	Each	
171040	30	None	20	\$14.00	
	Automatic	With Double Series I T L	Overload Trip	•	
171041	30	<b>2</b>	. 30	<b>\$4</b> 0. <b>00</b>	
171042	30	. 3	30	40.00	
171043	30	4	30	40.00	
1710 <del>44</del>	30	6	30	40.00	
171045	30	8	30	40.00	
171046	30	10	30	40.00	
171047	30	12	30	40.00	
171048	30	16	30	40.00	
171049	30	20	30	40.00	
171050	30	25	30	40.00	
171051	30	30	30	40.00	

††T. P. S. T. Plain Low Voltage Switches

List No.	Amp. Capacity	Volts Ci	rcuit————————————————————————————————————	Transformers Special No.	Approx. Wgt.	List Price Each
171052	30	110	60	None	Wgt. 22	\$30.00
		110	<b>25–40</b>	)		
171053	30	220	<b>25-40-60</b>	†191392	25	38.00
		440_	25-40-60	1191992	20	38.00
		550	25-40-60	)	•	

\*Load which the switch will carry continuously at 30 deg. C. rise or less. †Auto-Transformer with tap tagged to indicate proper connections for various voltages. †Release at approximately one-half rated voltage. Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house.

# G. E. OIL BREAK SWITCHES Type F, Form K-13 Oil Break Switches

3300 VOLTS—HAND OPERATED—200 AMPERES†
Operating Lever for Mounting on 1½ Inch or 2 Inch Panel

			Fo	r Panel Moun	ting———	For I	Panel Pipe Mo	unting
				Switch on Par	nei	,	on Panel Pip Back of Pan	pe, 5 Inch el
			Approx. Shpg. Wt. in Lbs.	List	List	Approx. Shpg. Wt.	List	List
	Poles ·	Throws		No.	Price	in Lbs.	No.	Price
•	D. P.	8. T.	80	129704	thout Overload \$57.20	90	129734	\$63.80
H H	T. P. 4 P.	8. T. 8. T.	80 100	129705 129706	70.40 85.80	90 110	129735 129736	77.00 92.40
	D. P. T. P.	D. T. D. T.	· 130 140	129707 129708	99.00 122.10	140 150	129737 129738	107.80 130.90
	4 P.	Б. Т.	170	129709	150.70	180	129739	159.50
1 200	D D	o T	Automa: 100	tic—One Coi 129728	l—Series Over		100750	<b>ec7 0</b> 00
	D. P. D. P.	S. T. D. T.	170	129729	$\$85.80 \\ 123.20$	110 180	129758 129759	\$87.90 132.00
DIE ME		~			ls—Series Over		400,000	****
THE BASE	T. P. 4 P.	S. T. S. T.	120 140	$\frac{129730}{129731}$	\$113.30 128.70	130 150	129760 129761	\$119.90 135.30
	T. P. 4 P.	D. P. D. T.	180 210	129732 129733	166 10 1 <b>94</b> . <b>70</b>	190 <b>220</b>	129762 129763	. 174.90 203.50
					C-ONE COIL			
	D D	0.00		e with Curre	ent Transform	ers	172075	<b>9</b> 00 E0
	D. P. T. P.	S. T. S. T.	90 90	173653 173654	\$75.90 89.10	100 100	173675 173676	\$82.50 95.70
	T. P. 4 P.	S. T. S. T.	110 110	17365 <b>5</b> 17365 <b>6</b>	89.10 104.50	100 120	1736 <b>77</b> 1736 <b>78</b>	<b>95.7</b> 0 111.10
	4 P. D. P.	S. T. D. T.	150 150	173657 173658	$104.50 \\ 118.80$	120 160	172679 173680	111.1 <sup>1</sup> 127.(
11	T. P.	D. T.	150	173659	141.90	160	173681	150.7
	T. P. 4 P.	D. <b>T</b> . D. <b>T</b> .	150 -180	173660 173661	141.90 170.50	160 190	173682 173683	150.70 179.10
	4 P.	D. T.	180	173662	170.50	190	173684	179
n-automatic			For	UTOMATIC	C—TWO COIL	S mers		
fingle Throw Switch on	. T. P.	8. T.	100	17366 <b>3</b>	\$105.60	170	173685	\$112.20
Panel	4 P. T. P.	S. T. D. T.	120 160	173665 173667	121.00 158.40	1 0 170	173687 173689	127.60 167.20
	4 P.	D. T.	190	173669	193.60	200	173691	195.80
					—THREE COI		,	
	T. P.	8. T.	110	173671	\$129.90	120	173693	\$136.40
	4 P. T. P.	8. T. D. T.	1 0 170	$\frac{173672}{173673}$	145.20 182.60	140 180	173694 17369 <b>5</b>	151.80 191.40
	4 P.	D. T.	200	173674	211.20	210	173696	220.00
			Approx.		Switch o	Remote Con n Panel Fran	trol ework	
Pole	Throws		Shpg. Wt.		List No.	Curren Transform	it	List Price
Lore	Intows	N.					1619	1110
D. P.	8. T.	No	n-automatic— 150		erioad Kelease 9764	•••		\$85.80
T. P.	8. T. 8. T.		150 170	12 19	9765 9766	••		99.00 114.40
D. P. T. P. 4 P. D. P.	D. T. D. T.		220 230	12	9767	::	-	156.20 179.30
T P. 4 P.	D. T.		260		9768 9769	••		207.90
			AUTOM	TIC-ONE	COIL			
D <b>F</b> ,	8. T.		For Use with 160		nsformers 73697			<b>\$</b> 104.50
T. P. T. P. 4 P. 4 P.	8. T. 8. T. 8. T. D. T. D. T.		160 160	17	73698 73699			\$104.50 117.70 117.70
4 P.	§. <u>T</u> .		180	17	73700	••		133.10
4 P. D. P.	8. T. D. T.		180 240	17 17	73701 73702	••		133.10 176.00
T. P. T. P.	D. T. D. T.		210 240	17	7370 <b>3</b> 73704	••		199.10 199.10
4 P.	D. <b>T.</b>		270	17	<b>'3705</b>	••		227.70
4 P.	D. T.		270		3706	••		227.70
			For Use with	TIC—TWO Current Tra				
T. P.	8. T. 8. T.		170 190		7370 <b>7</b> 73709	••		\$134.20 149.60
. 4 P. T. P.	D. P.		250	17	73711	••		<b>2</b> 15. <b>6</b> 0
4 P.	D. P.		250		73713	••		244.20
			AUTOMAT For Use with	IC—THREE Current Tra				
T. P. 4 P.	8. T.		180 200	17	73715 73716	••		\$158.40 173.80
Т. Р.	S. T. D. T.		260	17	73717	::		<b>239</b> .80
4 P. †Load which	D. T. the switch w	ill carry co	290 Intinuously at 30		'3718 se or less.	Ċ	00010	<b>268.40</b>
Delivery F. (	O. B. Factory	. Schenecti	ady, N. Y. For	warehouse de	liveries write n	arest house.	oogie	
Protective Anna	retue end S	iwitch hos	rd Accessories	39			-	

#### G. E. OIL BREAK SWITCHES

# Type F, Form K-13 Oil Break Switches

LOW-VOLTAGE RELEASE ATTACHMENTS

A complete line of new low-voltage release attachments is listed below for voltages up to and including 550 volts. Above 550 volts, use 110 volt attachment with series resistance in secondary of a voltage or potential transformer.

Plain Low-voltage Operating Levers

The attachments listed are for use with automatic operating levers. Where no overload features are required the left-hand low-voltage attachment for single throw, one coil lever may be used with a special, plain, low-voltage operating lever provided with a tripping toggle for the low-voltage attachment, but otherwise similar to non-automatic mechanism. Plain low-voltage switches are not listed but prices may be obtained by adding the list price of left hand, low-voltage attachment and transformer, if required, to the list price of a non-automatic (single throw) switch and substituting the plain low-voltage operating lever at the extra list price as per the following table:

For Substituting Plain Low-voltage Operating Levers

List	7. C. V. I. W	Non-Automatic,
No.	For Switch Mounted	Single Throw Switch
301878	On Panel	\$8.80
301879	On Panel Pipe	8.80
301880	Remote Control	8.80
*Do	uble throw switches are usually automatic and would use standard low-volts	ge attachments as

listed. Plain low-voltage, double throw switches will require special consideration. Prices on request.

# \*Low-voltage Release Attachments

#### **25-60 CYCLES**

For Single Throw Switch—One Coil Operating Lever Also Plain Low-voltage Operating Lever (Left Hand Only)

Approximate Left Hand I ine Ship. Weight †List Voltage in Lbs. No. ‡110 10 137655 220 10 137656 410 15 137657	†List No. 137659 137660 137661	List Price \$22.00 22.00
‡110 10 137655 220 10 137656	137659 137660	\$22.00
220 10 137656	137660	
		<b>22.0</b> 0
410 15 137657	137661	
		25.30
550 15 137658	137662	25.30
For Single Throw Switch—Two Coil (	Operating Lever	
‡110	137667	\$22.00
220 10 137664	137668	<b>22.0</b> 0
440 15 137665	137669	25.30
550 15 137666	137670	25.30
††For Double Throw Switch—One Coil	Operating Lever	
‡110	137675	\$22.00
220 10 137672	137676	22.00
440 15 137673	137677	25.30
550 15 137674	137678	25.30
For Double Throw Switch—Two Coil	Operating Lever	
<b>1110</b> 10 <b>137679</b>	137683	<b>\$22.00</b>
220 10 137680	137684	22.00
440 15 137681	137685	25.30
550 15 137682	137686	25.30

\*Low-voltage release operates at approximately one-half rated voltage.
†Includes series resistance for low-voltage coil, List No. 115968 for 110 volts, List No. 115967 for 220 volts, List No. 115966 for 440 volts, List No. 115965 for 550 volts.

‡For voltages above 550, use 110 volt low-voltage with series resistance and suitable voltage or potential transformer.

††Plain low-voltage operating lever not made for double throw. Use automatic switch with one lowvoltage release or refer for special quotation.

#### Shunt Resistance

To be used when low-voltage release is operated by being short-circuited (circuit-closing relays or auxiliary switches).

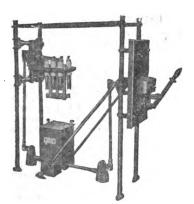
List		Ship. Weight	List
No.	Line Voltage	in Lbs.	Price
137580	110, 220, 450 or 550	5	\$4.40

#### Panels for Mounting

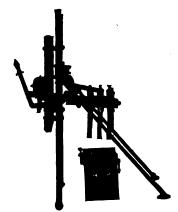
#### Dull Black Marine Finish With 48 Inch Pipe Supports and Floor Brace

List No.		All Capa	_	List
of Panel	Description .	Form	Throw	Price
133899	16 ins. high, 20 ins. wide, 1½ ins. thick	K-13	S.T.	\$22.00
133900	16 ins. high, 24 ins. wide, 1½ ins. thick	K-13	D.T.	26.40
Del	ivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliver	ies write ne	erest house	

#### G. E. OIL BREAK SWITCHES



Triple Pole, Single Throw, K-5 Automatic Oil Break Switch Remote Control



Triple Pole, Single Throw, K-5 Automatic Oil Break Switch Mounted on Panel Pipe Supports

# Oil Break Switches for 600, 4500 and 7500 Volt Alternating Current Service

TYPE F, FORM K-5

the Type F, Form K-5 oil break switch is a thoroughly reliable switch of moderate rupturing capacity for use on alternating current circuits up to 7500 volts.

It is the result of years of study and experience in the design, manufacture and use of oil break switches. and contains every essential for long and reliable service. It is liberally designed and conservatively rated, simple in construction and operation, made of the best materials, and is economical in initial cost, cost of installation and cost of upkeep.

The arc incident to opening the circuit is confined in the oil vessel under oil and cannot involve adjacent apparatus. The circuit is ruptured at the zero point of the wave, reducing to a minimum the possibility of a surge occurring on the line.

#### Capacities

This switch is made in the following capacities:

600 volt, 300 and 500 amperes, double, triple and four pole, single and double throw. 800 ampere single throw only.

4500 volt, 200 amperes, double, triple and four pole, single and double throw.

7500 volt, 300 and 500 amperes, single, double, triple and four pole, single and double throw.

The double throw switch consists of two single throw units with a common frame and oil vessel. operating levers are equipped with a simple and positive mechanical interlock so arranged that one switch only can be closed at a time.

#### Types

The Type F, Form K-5 oil break switches can be furnished as follows:

Non-automatic—Without overload release.

Automatic-With overload release, with trip coils for connecting to the secondaries of current transformers, up to 7500 volts; or with trip coils for connecting directly in series with the main circuit, up to 2500 volts.

For oil break switches we recommend No. 6 transil oil, which is prepared by a special process and is of superior quality because of its resistance to carbonizing and its high flash point.

#### Hand-operated Switches Include

Switch complete with oil, cable terminals and insulating sleeves,

Operating mechanism except pipe connecting rods,

Current transformers (for automatic current transformer trip switches only).

#### Solenoid-operated Switches

Solenoid-operating mechanisms can be furnished for operating any of the K-5 switches. These consist of the ordinary closing and opening solenoids wound for 125, 250 or 600 volts direct current, and are operated by suitable control switches and relays. Digitized by Google

# G. E. OIL BREAK SWITCHES Type F, Form K-5 Oil Break Switches

Hand Operated-Without Overload Release-Non-automatic

				Operating	Mechanis	m for Mor	unting on 13	2 In. or 2	In. Panel		
Poles and Throw	No. Coils	†Amp. Cap.	Voltage		NEL MOU		Switch	FOR PANEL PIPE MOUNTING Switch on Panel Pipe, 5 in. Back of Panel			
				Approx. Shpg. Wt. in Lbs.	List No.	List Price	Approx. Shpg. Wt. in Lbs.	List No.	List Price		
D. P.—S. T. D. P.—S. T. D. P.—S. T. T. P.—S. T. T. P.—S. T. T. P.—S. T. 4 P.—S. T. 4 P.—S. T. D. P.—D. T. D. P.—D. T.		300	600 600 600 600 600 600 600 600 600 600	160 170 190 170 190 200 230 250 260 260 290 280	127411 127417 127423 127412 127418 127424 127413 127419 127425 127414 127420 127415	\$68.20 99.00 149.60 90.20 130.90 202.40 111.10 161.70 264.00 134.20 180.40 167.20	170 180 200 180 200 210 240 260 270 270 300 290	127487 127493 127499 127488 127494 127500 127489 127495 127490 127496 127496	\$80.30 104.50 155.10 96.89 136.40 207.90 117.70 167.20 269.50 141.90		
T. P.—D. T. 4 P.—D. T. 4 P.—D. T.	::	500 300 500	600 600 600	310 350 410	127421 127416 127422	233.20 203.50 284.90	320° 360 420	$\begin{array}{r} 127497 \\ 127492 \\ 127498 \end{array}$	240.90 211.20 292.60		

# Hand Operated—With Overload Release—Automatic With Trip Coils for Connection in Series with Main Circuit

# Hand Operated—With Overload Release—Automatic With ONE Trip Coil for Use With Current Transformers

CINE.				Operating	Mechani	sm for Mo	unting on 1	2 In. or 2	In. Panel
Poles and Throw	No. Trans- form- ers	†Amp. Cap.		FOR PAN	NEL MOU		Switch	PANEL DOUNTING On Panel Back of P	Pipe,
				Approx. Shpg. Wt. in Lbs.	List No.	List Price	Approx. Shpg. Wt. in Lbs.	List No.	List Price
D. P.—S. T D. P.—S. T D. P.—S. T T. P.—S. T T. P.—S. T T. P.—S. T T. P.—S. T T. P.—S. T 4 P.—S. T 4 P.—S. T 4 P.—S. T	1 1 2 2 2-3 2 2 2-3 2 2-3 2 2-3 2 2 2-3 2 2 2-3 2 2 2-3 2 2 2 3 2 3 2 2 3	300 500 800 300 300 500 500 800 300 300 500 800 300 300 300 300 800 800 8	600 600 600 600 600 600 600 600 600 600	190 210 220 190 190 210 210 220 220 240 240 260 260 270	173861 173871 173881 173862 173863 173872 173873 173882 173883 173864 173865 173874 173875	\$97.90 123.20 178.00 114.40 114.40 155.10 1226.60 226.60 135.30 185.90 185.90 288.20	210 230 240 210 210 230 230 240 240 260 280 280 280 290	173916 173926 173936 173937 173918 173927 173928 173937 173938 173919 173920 173929 173930 173939	\$104.50 128.70 179.30 121.00 121.00 160.00 232.10 232.10 141.90 191.40 191.40

# HAND OPERATED—WITH OVERLOAD RELEASE—AUTOMATIC With One Trip Coil for Use with Current Transformer

	***************************************						
D. P.—D. T. 1 D. P.—D. T. 1 T. P.—D. T. 2 T. P.—D. T. 2-3 T. P.—D. T. 2-3 T. P.—D. T. 2-3 4 P.—D. T. 2-3	300 500 300 500 300 300 300	600 600 600 600 600 600	330 360 350 350 380 410 410	173866   \$159.50 173876   205.70 173867   192.50 173868   192.50 173877   259.70 173869   228.80 173879   228.80 173870   228.80	330 360 350 350 380 380 410 410	173921 173931 173922 173923 173932 173933 173924 173925	\$167.20 213.40 200.20 200.20 266.20 266.20 236.50 236.50
4 P.—D. T. 2-3 4 P.—D. T. 2	500 300	600 600 600	410 460 460	173870   228.80   173879   310.20   173880   310.20	410 460 460	173925 173934 173935	236.50 317.90 317.90

\*When ordering, specify ampere capacity of series coils required for each switch.
†Load which the switch will carry continuously at 28 degrees C. rise or less.
Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest bouse.

# G. E. OIL BREAK SWITCHES

# TYPE F, FORM K5—HAND OPERATED—WITH OVERLOAD RELEASE—AUTOMATIC With TWO Trip Coils for Use With Current Transformers

<del></del>		l		Operating Mec	hanism for Moun	ting on 13/2 In.	or 2 In. Panel						
No. Trans- formers	†Amp. Cap.	Voltage	FOR	PANEL MOU Switch on Pan	INTING	FOR PA	FOR PANEL PIPE MOUNTING Switch on Panel Pipe 5 In. Back of Panel						
			Approx. Shpg. Wt. in Lbs.	List No.	List Price	Approx. Shpg. Wt. in Lbs.	List No.	List Price					
	TRIPLE THROW—SINGLE THROW												
2	300	600	200	173886	\$133.10	220	173941	\$139.70					
2 2 2	500 800	.600 600	220 230	173894 173902	173.80 245.30	240 250	173949 173957	179.30 250.80					
FOUR POLE—SINGLE THROW													
2	300	600	250	173888	\$154.00	270	173943	\$160.60					
2 2 2	500 800	600 600	270 280	173896 173904	204.60 306.90	290	173951 173959	210.10 312.40					
<u>- 1</u>		1 000	·		-DOUBLE T	<u> </u>	1,000						
$\frac{2}{2}$	300 500	600	330	173890 173898	\$211.00 277.20	360	173945 173953	\$218.19 284.90					
2		1 000					110900	201.50					
					OUBLE THE								
$\frac{2}{2}$	300 500	600 600	390 440	173892 173900	\$248.40 328.90	420	173947 173955	\$255.20 336.60					
	•		For U	Use With Cu	e Trip C arrent Transf -SINGLE TH	ormer	,	•					
3	200	4500	230	174025	\$154.00	250	174091	\$160.60					
3	300 500	7500 7500	250 260	174029 174033	174.90 211.20	270 280	174095 174099	180.40 216.70					
			Fou	r Pole—	Single Th	irow	· · · · · · · · · · · · · · · · · · ·						
$\begin{bmatrix} 3 \\ 3 \end{bmatrix}$	200 300	4500 7500	280 300	174026 174030	\$172.70 204.60	300 320	174092 174096	\$179.30 210.10					
3	500	7500	310	174034	251.90	330	174100	257.40					
			Tripl	le Pole—	Double T	hrow							
3	200	4500	340	174027	\$224.40	370	174093	\$232.00					
3 3 3	300 500	7500 7500	370 390	174031 174035	255.20 313.50	400 420	174097 174101	251.90 321.20					
			Fou	r Pole—I	Double T	hrow	•						
3	200	4500	420	174028	\$251.90	450	174094	\$259.60					
3 8 3	300 500	7500 7500	450 470	174032 174036	299.20 377.30	480 500	174098 174102	306,90 385.00					
				Y. For wa	rehouse delive	ries write ne		)					

# G. E. OIL BREAK SWITCHES Type F, Form K-5 Oil Break Switches

#### LOW-VOLTAGE RELEASE ATTACHMENTS

A complete line of new low-voltage release attachments is listed below for voltages up to and including 550 volts. Above 550 volts, use 110 volt attachment with series resistance in secondary of a voltage or potential transformer.

# Plain Low-voltage Operating Levers (See Type F, Form K-13 for description.) For Substituting Plain Low-voltage Operating Lever

	•	Add to List Price
List		Non-Automatic
No.	For Switch Mounted	Single Throw Switch*
302509	On panel	<b>\$</b> 8.80
302510	On panel pipe	8.80
302511	Remote Control	8.80
*Dou	ble throw switches are usually automatic and would use standard low-volt	age attachments as
listed.	•	

Plain low-voltage, double throw switches will require special consideration. Prices on request.

### LOW-VOLTAGE RELEASE ATTACHMENTS

25-60 Cycles

For Single Throw Switch—One-coil Operating Lever Also Plain Low-voltage Operating Lever (Left Hand Only)

	Also I Idili Don-10	icago operacing bever	(More riana Only)	
	Approximate	Left Hand	Right Hand	
Line	Shipping Weight	†List	†Lis <b>t</b>	†List
Voltage	in Lbs.	No.	No.	Price
<b>‡110</b>	10	137581	137585	\$22.00
220	10	137582	137586	22.00
440	15	137583	137587	25.30
550	15	137584	137588	25.30
000		w Switch—Two-coil O		20.00
<b>‡</b> 110	10	137589	137593	\$22.00
220	iŏ	137590	137594	22.00
440	15	137591	137595	23.30
550	15	137592	137596	23.30
000		v Switch—Three-coil		20.00
<b>1</b> 110	10	137597	137601	\$22.00
220	10	137598	137602	22.00
440	15	137599	137603	25.30
550	15	137600	137604	25.30
000		w Switch—One-coil O		20.00
<b>‡</b> 110	10	137605	137609	\$22.00
220	10	137606	137610	22.00
440	15	137607	137611	25.30
550	15	137608	137612	25.30 25.30
000		ow Switch—Two-coil (		20.00
<b>‡</b> 110	10	137613	137617	\$22.00
220	• 10	137614	137618	22.00
440	15	137615	137619	25.30
550	15	137616	137619	
990		w Switch—Three-coil		25.30
<b>+110</b>				e00 00
<b>‡</b> 110	10	137621	137625	\$22.00
220	10	137622	137626	22.00
440	15	137623	137627 .	25.30
550	15	137624	137628	<b>25.30</b>

Low-voltage release operates at approximately one-half rated voltage.
†Includes series resistance for low-voltage coil List No. 115968 for 110 volts, List No. 115967 for 220

volts, List No. 115966 for 440 volts, and List No. 115965 for 550 volts.

For voltages above 550, use 110 volt low-voltage with series resistance and suitable voltage or potential transformer.

††Plain low-voltage operating lever not made for double-throw. Use automatic switch with one lowvoltage release or refer for special quotations.

#### Shunt Resistance

	e used when low-voltage release is	operated by being short ci	rcuited (circuit closing	relays or
auxiliary a	switches).		_	•
List	•	• •	Ship. Weight	List
No.	Line Voltage		in Lbs.	Price
137580	110, 220, 440 or 550			<b>\$4.40</b>
		LARM SWITCHES		
List				List
No.	For Use With			Price

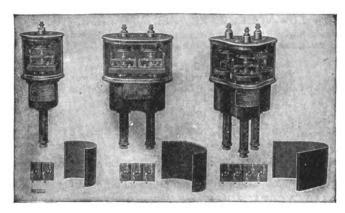
139335 K-5 oil switches mounted on 1½ or 2 inch panels.

139336 K-5 oil switches mounted on panel pipes or remote control. \*\*Operate only when the oil switch operates automatically.

Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house.

\$2.20

### G. E. RELAYS



No. 102729 No. 102730 No. 102731

Type P, Form G, InverselTime Limit Overload Circuit-Closing Relay, with Cover

# A.C. Overload TIME ELEMENT

Circuit-closing and circuit-opening relays are further subdivided into instantaneous and time-limit. Instantaneous relays operate almost instantly on the half second to about 30 seconds delay depending on the time setting and the magnitude of the overload current. A setting of from two to six seconds is ordinarily used, depending upon requirements; where selective operation is desired a minimum setting of two seconds is recommended.

two seconds is recommended.

Under conditions of overload or short circuit the inverse time-limit relay operates in inverse ratio to the strength of the current. Therefore, the heavier the overload or short circuit the more rapidly the relay will operate.

\*For Use with Current Transformers Having 5 Ampere Secondaries
Instantaneous—Overload

List No.	Туре	No. of Contacts per Pole	Form	Descriptive	Poles	Ship. Wt. in Lbs.	List Price Each		
102720	P	2	F	Circuit closing—normally open	S.P.	10	\$22.28		
102721	P	2	F	Circuit closing—normally open	D.P.	18	37.12		
102722	P	2	F	Circuit closing—normally open	T.P.	25	54.46		
102726	P	3	F3	Circuit closing—normally open	S.P.	10	24.76		
102727	l P	3	F3	Circuit closing—normally open	D.P.	18	42.08		
102728	P	3 2 2 2	F3	Circuit closing—normally open	<b>T.P.</b>	25	59.40		
102723	P	2	F2	Circuit opening—normally closed	S.P.	10	24.76		
102724	P	2	F2	Circuit opening—normally closed	D.P.	18	42.08		
102725	P	2	F2	Circuit opening—normally closed	I T.P.	25	61.88		
Inverse Time Limit—Overload									
102729	P	1 2.	G	Circuit closing—normally open	1 S.P.	15	\$34.66		
102730	P P	2· 2 2 3	G	Circuit closing—normally open	D.P.	25	59.50		
102731	l P	2	G	Circuit closing—normally open	T.P.	35	86.62		
102735	P	3	G3	Circuit closing—normally open	S.P.	15	37.12		
102736	P	3 3 2 2	G3	Circuit closing—normally open	D.P.	25	64.36		
102737	P	3	G3 .	Circuit closing—normally open	T.P.	35	91.58		
102732	P	2	G2	Circuit opening—normally closed	S.P.	15	37.12		
102733	P	2	G2	Circuit opening—normally closed	D.P.	25	64.36		
102734	P	2	G2	Circuit opening—normally closed	T.P.	35	94.06		
				Definite Time Limit—Overload					
102738	P	2	G10	Circuit closing—normally open	S.P.	15	\$34.66		
102739	P P	2	G10	Circuit closing—normally open	D.P.	25	59.40		
102740	P	2	G10	Circuit closing—normally open	T.P.	35	86.62		
102741	P	2 2 3	G11	Circuit closing—normally open	S.P.	15	37.12		
102742	P	3	G11	Circuit closing—normally open	D.P.	25	64.36		
102743	P	3	G11	Circuit closing—normally open	T.P.	35	91.58		
102744	P	2	G12	Circuit opening—normally closed	S.P.	15	37.12		
102745	P	2	G12	Circuit opening—normally closed	D.P.	25	64.36		
102746	P	2	G12	Circuit opening—normally closed	T.P.	35	94.06		
*No	transfor	rmer inch	hop			-			

\*No transformer included.

Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house.

# Western Electric

#### G. E. RELAYS







Type R, Form B-3

# Direct Current Reverse Current Relays

Type R, Form B-2

The Type R, Form B-2 Reverse Current Relay is designed for mounting on circuit breaker studs. It consists of a horseshoe magnet with a shunt wound armature pivoted between its poles. The magnet is mounted on the current-carrying stud of the circuit breaker between the back of the panel and the first contact or supporting nut, and is placed in a vertical position.

The contacts are insulated from the magnet, permitting the use of an auxiliary circuit for the tripping device, independent of the circuit controlled by the circuit breaker. This is highly desirable on 600 volt systems where a reliable low voltage auxiliary source is available.

#### Type R, Form B-3

These relays are for the same purpose and perform the same functions as the Type R, Form B-2, Reverse Current Relays, and they are similar in their method of operation.

Being for smaller capacity service, a coil instead of the stud is used to furnish a field for the armature.

# Instantaneous—Single Pole—Circuit Closing (Normally Open)

# (No Covers)

#### Type R, Form B-2

			1 y pc 11, 1 011			
†Lis <b>t</b>		*Ampere	Calibration Operates on Reversal	Size of Circuit Breaker	Shipping Weight	List Price
No.	Volts			Stud in Ins.	Lbs.	
		Capacity	Amperes			Each
<b>43462</b>	125	800	200	11/8	20	\$88.00
102867	125	1000	200	11/4	20	88.00
43463	125	1200	200	11/4	20	88.00
64813	125	1500	200	$1\frac{1}{2}$	20	88.00
43464	125	<b>200</b> 0	200	13/4	20	88.00
64814	125	3000	200	2	20	. 88.00
<b>43465</b>	125	<b>400</b> 0	<b>20</b> 0	$2\frac{1}{2}$	20	88.00
102868	125	<b>` 5000</b>	200	$2\frac{3}{4}$	20	88.00
43466	125	6000	200	314	20	88.00
64819	125	8000	200	4	20	88.00
43467	<b>250</b>	800	200	11/8	20	88.00
102869	250	1000	200	114	20	88.00
43468	<b>25</b> 0	1200	200	11/4	20	'88.00
64815	250	1500	200	$\frac{1}{14}$ $\frac{1}{12}$	20	88.00
43469	250	2000	200	134	20	88.00
64816	250	3000	200	2	20	88.00
43470	250	4000	200	$2\frac{1}{2}$	20	88.00
102870	250	5000	200	234	20	88.00
43471	250	6000	200	$3\frac{1}{4}$	20	88.00
64820	250	8000	200	4	20	88.00
43472	550	800	200	11/8	20	88.00
102871	550	1000	200	1 1/4 1 1/4	20	88.00
43473	550	1200	200	11/4	20	88.00
64817	550	1500	200	1 1/2	20	88.00
43474	550	2000	200	134	20	88.00
64818	550	3000	200	<b>2</b>	20	88.00
43475	550	4000	200	$\frac{2}{2}\frac{1}{2}$ $2\frac{3}{4}$	20	88.00
102872	550	5000	200	$2\frac{3}{4}$	20	88.00
43476	<b>550</b> .	6000	200	$\overline{3}$ $\overline{1}$ $\overline{4}$	20	88.00
64821	550	8000	200	4	20	88.00
				ā.,	20	00.00

\*Load which the relay will carry continuously at 30 degrees C. rise or less.

†Proper series resistance for potential circuit is included.
Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house.

# G. E. RELAYS

## D.C. Reverse Current for Circuit Breakers

# Instantaneous—Single Pole—Circuit Closing (Normally Open) (No Covers)

Type	R,	Form	B-3
------	----	------	-----

List No.	Volts	Ampere Capacity	Calibration Operates on Reversal Amperes	Size of Circuit Breaker Stud in Ins.	Shipping Weight Lbs.	List Price Each
43441	125	15	4	3/6	15	<b>\$73.00</b>
43442	125	$\frac{10}{25}$	$\bar{6}$	3%	15	73.00
102858	125	40	10	8%	15	74.58
43443	125	50	12	3%	15	74.58
102859	125	75	$\frac{1}{20}$	8/8/9/8/9/8/9/8/9/8/9/8/9/8/9/8/9/8/9/8	15	74.58
43444	125	100	25	3%	15	74.58
43445	125	200	50	íå	15	74.58
43446	125	300	75	5/6	15	74.58
43447	125	500	125	1%	15	74.58
102860	125	600	150	1′°	15	82.90
43448	250	15	4	3/6	15	73.00
43449	250	25	6	\$\@\@\@\@\@\@\@\@\@\@\@\@\@\@\@\@\@\@\@	15	73.00
102861	250	40	10	3%	15	75.48
43450	250	50	12	3%	15	75.48
102862	250	75	20	8%	15	75.48
43451	250	100	25	8%	15	75.48
43452	250	200	50	íž	15	75.48
43453	250	300	75	5/8	15	75.48
43454	250	500	125	<b>1%</b>	15	75.48
102863	250	600	150	<b>1</b> %	15.	82.90
43455	650	15	4	1 "	15	73.00
43456	650	25	6	3/8	15	73.00
102864	650	40	10	3/8	15	75.48
43457	650	50	12	3%	15	75.48
102865	650	75	20	3%	15	75.48
43458	650	100	<b>2</b> 5	3/8	15	75.48
43459	650	. 200	50	\$\8\8\8\8\8\8\\$\\$\\$\\$\\$\\$\\$\\$\\$\\$\\$\\$\\$	15	75.48
43460	650	300	75	5%	15	75.48
43461	650	500	125	<b>1</b> %	15	75.48
102866	650	600	150	1 ~	15	82.90

# Direct Current—Overload—Low Tension SINGLE POLE CIRCUIT CLOSING TWO CONTACT

600 Volts or Less

#### Instantaneous

#### Inverse Time

Type P Form	Amp.		ration	Shpg.	List Price	Type P Form C25	Amp.	Calib	ration	Shpg.	List Price
B-25 List No.	Capacity	Min.	Max.	Wgt.	Each	List No.	Capacity	Min.	Max.	Wgt.	Each
64802	15	10	25	20	\$24.76	102831	15	10	25	20	\$38.36
64803	25	15	40	20	25.98	102832	25	15	40	20	39.60
64804	40	20	60	20	25.98	102833	40	20	60	20	39.60
64805	50	25	70	20	25.98	102834	50	25	75	20	39.60
64806	75	40	125	$\overline{20}$	25.98	102835	75	40	125	20	39.60
64807	100	· 50	150	20	25.98	102836	100	50	150	20	39.60
120990	150	75	225	20	37.12	120992	150	75	225	20	49.50
64808	200	100	300	20	37.12	102837	200	100	300	20	49.50
64809	300	150	450	20	37.12	102838	300	150	450	20 20 E	49.50
120991	400	200	600	30	39.60	120993	400	200	600	30	51.98
64810	500	250	750	30	39.60	102839	500	250	750	30	51.98
102829	600	300	900	30	55.68	102840	600	300	900	30	68.06
						100044	ا ممم ا	400	۱		
64811	800	400	1200	35	55.68	102841	800	400	1200	35	68. <b>0</b> 6
102830	1000	500	1500	35	61.80	102842	1000	500	1500	35	74.26
64812	1200	800	1800	35	66.82	102843	1200	800	1800	35	79.20

Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house.

#### G. E. RELAYS







Type P, Form B-45 Solenoid Control Relay With Support

## Alternating Current Relays—Low Voltage

INSTANTANEOUS—TYPE P, FORM F10 CIRCUIT-CLOSING TWO CONTACT 600 VOLTS OR LESS FOR MOUNT-ING ON FRONT OF PANEL

The contacts of this relay are similar to those of circuit-closing overload relays except that they are inverted. These relays are connected directly across the line with proper resistance in series with the relay coil. As long as the potential is normal the contact cone is held above the contacts. When the potential falls below one-half normal the core and plunger rod drop and close the contact. This relay does not pick up its own plunger. The plunger rod is pushed up by hand after the potential circuit is established. Low-voltage relays are generally used in connection with a low-voltage release or shunt trip coil on an oil switch or a circuit breaker. They are used in connection with motor-booster sets to prevent a diaastrous speed of the booster which might result from the loss of alternating current power. They are also sometimes used for indicating purposes. purposes.

	SINGLE PO	)LE			DOUBLE POL	E	
		Approx. Shpg.			•	Approx. Shpg.	
List		Wt. in	List	List		Wt. in	List
No.	Volts	Lbs.	Price	No.	Volts	Lbs.	Price
102819	110 (125)	10	\$24.76	102824	110 (125)	15	\$30.60
102820	240	10	24.76	102825	240	15	30.60
102821	370	10	27.22	102626	370	15	47.02
102822	480	10	27.22	102827	480	15	47.02
102823	600	ĩõ	27.22	102828	600	15	47.02

#### \*OVERLOAD-LOW TENSION SERIES

Single Pole-Circuit-closing-Two Contact 600 Volts or Less-Back Connected for Mounting on Front of Panel

Instantaneous	Inverse				Approx.		
Type P. Form B36	Type P. Form C36				Shpg.	List I	Price
List	List	*Ampere	Calib	ration	Wt. in	Instan-	Inverse
No.	No.	Capacity	Min.	Max.	Lbs.	taneous	Time
102783	102796	15	10	25	20	\$24.76	<b>\$3</b> 8.36
102784	102797	25	15	40	20	25.98	39.60
102785	102798	40	20	60	20	25.98	39.60
102786	102799	50	25	75	20	25.98	39.90
102787	102800	75	40	125	20	25.98	39,60
102788	102801	100	50	150	20	25.98	39.60
120952	120954	150	75	225	20	37.12	49.50
102789	102802	200	100	300	20 .	37.12	49.50
102790	102803	300	150	450	20	37.12	49.50
120953	120955	400	200	600 .	30	30.60	51.98
102791	102804	500	250	750	30 ·	30.60	51.98
102792	102805	600	300	900	<b>3</b> 0	55.68	68.06
102793	102806	800	400	1200	35	55.68	68.06
102794	102807	1000	500	1500	35	61.88	74.26
102795	102808	1200	600	1800	35	66.82	79.20
	the relay will carry cor				00	00.02	10.20

# Direct Current Relays

SOLENOID CONTROL-TYPE P, FORM B-45

Single-Pole-circuit Closing—600 Volts or Less—For Use with Solenoid Operated Oil Switches and Circuit Breakers

The Type P Form B-45 relay supersedes the Form B-10.

Mounting. The support furnished is so arranged that it may be mounted on flat surface or on vertical or horisontal pipe.

Construction. The B-45 is similar to the B-10 except that the break is longer and more rapid. A flexible lead is provided between the movable contact arm and its support, insuring positive connection. The relay can be operated by means of the insulated button.

Contacts. Copper contacts only are furnished and will control circuits of 150 amperes at 125 volts, 75 amperes at 250 volts and 25 amperes at 600 volts. Relays will operate positively at one half of rated voltage.

	Voltage of	For		Approx.	
	Control	Mounting		Ship. Wt.	
List No.	Circui <b>t</b>	on	Circuit	in Lbs.	List Price
177898	125	Panel or 11/4 in.		20	\$19.80
177899	· <b>2</b> 50	vertical or hori-	One	20	22.28
177000	800	eantal nine		20	97 99

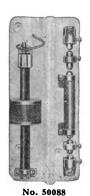
\*List No. includes yoke for 11/2 inch pipe mounting. For flat surface mounting customer will substitute proper length

Prices on reverse phase, reverse current and series overload relays, low voltage and signal relays sent upon request. Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house.

# GARTON-DANIELS LIGHTNING ARRESTERS











No. 50091

# Alternating Current Types

Garton-Daniels Alternating Current Arresters are furnished according to practically the same specifications applying to the direct current arresters listed on following page. They combine the well recognized principles of a small air gap, a low series resistance, and a circuit-breaker; these three features in combination giving an arrester unsurpassed in points of efficiency, reliability and durability.

List					· Net	List
No.	Type	Voltage	Description	Dimensions Inches	Weight	Price Each
300	Т	Up to 350	Iron covered	$3\frac{1}{2} \times 3\frac{1}{2}$	2 lbs. 10 ozs.	\$3.60
50014	$\mathbf{DF}$	Up to 350	Station	$8\frac{1}{2} \times 3 \times 3$	23/4 lbs.	7.68
50016	$\mathbf{DF}$	Up to 350	Iron covered	$12\frac{1}{2} \times 6 \times 4$	11 1/8 lbs.	9.36
50015	DF	Up to 350	Wood covered	$13\frac{1}{2} \times 7 \times 6$	63/4 lbs.	7.68
50017	$\mathbf{FH}$	350 to 1,200	Station	$10\frac{1}{2} \times 3\frac{5}{4} \times 3$	43/4 lbs.	8.40
50018	$\mathbf{F}\mathbf{H}$	350 to 1,200	Iron covered	$14\frac{1}{8} \times 6\frac{1}{2} \times 4\frac{1}{2}$	$15\frac{3}{4}$ lbs.	9.84
<b>5001</b> 9	$\mathbf{FH}$	350 to 1,200	Wood covered	$14\frac{1}{2} \times 7 \times 6\frac{1}{4}$	8¾ lbs.	8.40
50020	$\mathbf{CE}$	1,200 to 2,500	Station	$14 \times 3\frac{1}{2} \times 3\frac{3}{4}$	$6\frac{3}{4}$ lbs.	10.56
50021	$\mathbf{CE}$	1,200 to 2,500	Iron covered	$16\frac{7}{8} \times 6 \times 5$	21 lbs.	12.00
$50022\dots\dots$	$\mathbf{CE}$	1,200 to 2,500	Wood covered	19 x $7\frac{1}{2}$ x $7\frac{1}{4}$	$12\frac{1}{2}$ lbs.	10.56
<b>50088</b>	CE-2	1,200 to 2,500	Station type	11 x $4\frac{3}{4}$ x $3\frac{1}{8}$	8 lbs.	10.56
<b>5008</b> 9	CE-2	1,200 to 2,500	Wood covered	$18 \times 8\frac{1}{4}  6\frac{1}{4}$	$13\frac{1}{2}$ lbs.	10.56
$50329\ldots\ldots$	F-2S	2,500-3ph. Y	Station type	$14\frac{3}{8} \times 4\frac{3}{4} \times 3\frac{1}{8}$	11½ lbs.	12.00
50330	F-2S	2,500-3ph. Y	Wood covered	$20\frac{1}{2} \times 8\frac{1}{4} \times 6\frac{1}{4}$	15¾ lbs.	12.00
50091	$\mathbf{F}$ -2	$2,500 \text{ to } \cdot 3,500$	Station type	$14\frac{3}{8}$ x $4\frac{3}{4}$ x $3\frac{1}{8}$	11½ lbs.	12.00
$50092\ldots$	F-2	2,500 to 3,500	Wood covered	$20\frac{1}{2} \times 8\frac{1}{4} \times 6\frac{1}{4}$	$15\frac{3}{4}$ lbs.	12.00
<b>500</b> 93	CE-2	3,500 to 5,000	Station	34 x 8 x 6 1/8	$26\frac{1}{2}$ lbs.	<b>22</b> .32
50094	CE-2	3,500 to 5,000	Wood covered	$33 \times 13 \times 15\frac{1}{2}$	49 lbs.	<b>22</b> .32
50095	F-2	5,000 to 6,600	Statior.	$39\frac{3}{4} \times 8 \times 17\frac{1}{2}$	41 lbs.	<b>28</b> .56
$50096 \dots$	F-2	5,000 to 6,600	Wood covered	38 $\times 13 \times 15\frac{1}{2}$	55 lbs.	<b>28</b> . <b>56</b>
50442	F-2S	*6,600 s. ph.	Station Type	$56\frac{1}{2} \times 8 \times 17\frac{1}{2}$	58 lbs.	46.92
<b>5044</b> 3	F-2S	*6,600 s. ph.	Wood Covered	$56\% \times 13 \times 15\frac{1}{2}$	69 lbs.	<b>46</b> .92
50097	CE-2	6,600 to 7,500	Station	48 x 8 x $17\frac{1}{2}$	46 · lbs.	<b>43</b> .68
50098	CE-2	6,600 to 7,500	Wood covered	49 x 13 x $15\frac{1}{2}$	59 lbs.	<b>43</b> .68
50099	F-2	7,500 to 8,500	Station	$56\frac{1}{2} \times 8 \times 17\frac{1}{2}$	58 lbs.	<b>46</b> .92
50100	F-2	7,500 to 8,500	Wood covered	$-56\frac{5}{8} \times 13 \times 15\frac{1}{2}$	69 lbs.	46.92
50101	F-2	8,500 to 10,000	Station	73 x 8 x 18	71 lbs.	<b>58.32</b>
50102	F-2	8,500 to 10,000	Wood covered	71 x 13 x $15\frac{1}{2}$	93 lbs.	<b>58.32</b>
50103	F-2	10,000 to 12,500	Station	89 x 8 x 18	89 lbs.	73.08
50104	F-2	10,000 to 12,500	Wood covered	$87\frac{1}{2} \times 13 \times 15\frac{1}{2}$	116 lbs.	73.08
50105	F-2	12,500 to 15,000	Station	106 x 8 x 18	106 lbs.	88. <b>68</b>
50106	F-2	12,500 to 15,000	Wood covered	104 x 13 x 15½	139 lbs.	88.68
50107	F-2	15,000 to 17.500	Station	122 x 8 x 18	123 lbs.	106.80
50108	F-2	17,500 to 20,000	Station	139 x 8 x 18	140 lbs.	120.00
*Railway C	ircuit.					

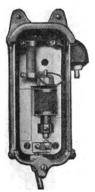
# Alternating Current Arc Arresters

50020	$\mathbf{CE}$	Up to 2,500	Station		$6\frac{3}{4}$ lbs.	\$10.56
50021	$\mathbf{CE}$	Up to 2,500	Iron Covered		21 Îbs.	12.00
50022	$\mathbf{CE}$	Up to 2,500	Wood Covered	• • • • • • • • • • • • • • • • • • • •	$12\frac{1}{2}$ lbs.	10.56
50091		2,500 to 3,500	Station		$11\frac{1}{2}$ lbs.	12.00
50092	F-2 ·	2,500 to 3,500	Wood Covered		15¾ lbs.	12.00
50093		3,500 to 5,000			$26\frac{1}{2}$ lbs.	<b>26.40</b>
50094	$\mathbf{CE-2}$	3,500 to 5,000	Wood Covered	Digitized by C	49   lbs.	<b>26.40</b>

69

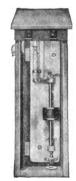
E

### GARTON-DANIELS LIGHTNING ARRESTERS









No. 50016 No. 50041

No.]50401

No. 50400

# Direct Current Types

Direct current arresters, station type, are furnished with highly polished and lacquered metal work. Pole or car arresters have a dipped metal finish, but aside from this, are the same as the station type. Pole and car arresters are furnished in either wooden or iron covers, as required. Iron covers are, however, not furnished on the Types EH, EI and EJ arresters. Both covers are of standard design, fitted with insulated bushings for the leading-in wires and the arrester carefully insulated from the cover.

#### Description and List Prices

List				Dimensions	Wt.	List
No.	Туре	Voltage	Description	Inches	Lbs.	Price Each
50014	$\mathbf{DF}$	Up to 350	Station type	$8\frac{1}{2} \times 3 \times 3$	23/4	<b>\$7.68</b>
50016	DF	Up to 350	Iron covered	$12\frac{1}{2} \times 6 \times 4$	111/8	9.36
50015	$^{1}$ DF	Up to 350	Wood covered	$13\frac{1}{2} \times 7 \times 6$	634	7.68
50039	$\mathbf{EG}$	350 to 750	Station type	$9\frac{7}{8}$ x $3\frac{5}{6}$ x 3	41/2	10.08
50040	$\mathbf{EG}$	350 to 750	Iron covered	$13\frac{1}{2} \times 6\frac{1}{2} \times 4\frac{1}{2}$	$13\frac{1}{2}$	11.52
50041	$\cdot$ <b>EG</b>	350 to 750	Wood covered	$14\frac{1}{2} \times 7 \times 6\frac{1}{4}$	81/2	10.08
11779	$\mathbf{EG}$	350 to 750	Iron car	$13\frac{1}{2} \times 6\frac{1}{2} \times 4\frac{1}{2}$	$13\frac{1}{2}$	11.52
11780	$\mathbf{EG}$	350 to 750	Wood car	$14 \times 7 \times 6\frac{1}{4}$	81/2	10.08
50338	$\mathbf{E}\mathbf{H}$	750 to 1300	Station	19 x 4½ x 3½	$11\frac{1}{2}$	20.16
50339	$\mathbf{E}\mathbf{H}$	750 to 1300	Wood car	$25\frac{1}{4} \times 8\frac{3}{4} \times 7\frac{3}{4}$	21	20.16
50400	$\mathbf{E}\mathbf{H}$	750 to 1300	Wood covered	$21\frac{1}{2} \times 10\frac{1}{2} \times 6\frac{3}{4}$	$21\frac{1}{2}$	20.16
50401	Εl	1300 to 1500	Station	19 x $4\frac{1}{2}$ x $3\frac{1}{8}$	111/2	23.04
50402	ΕI	1300 to 1500	Wood car	$25\frac{1}{4} \times 8\frac{3}{4} \times 7\frac{3}{4}$	21	<b>23</b> .04
50403	$\mathbf{EI}$	1300 to 1500	Wood covered	$21\frac{1}{2} \times 10\frac{1}{2} \times 6\frac{3}{4}$	211/2	23.04
50404	$\mathbf{E}\mathbf{J}$	1500 to 1800	Station	19 x $4\frac{1}{2}$ x $3\frac{1}{8}$	111/2	<b>24</b> .48
<b>5040</b> 5	EJ	1500 to 1800	$\mathbf{Wood}\ \mathbf{car}$	$25\frac{1}{4} \times 8\frac{3}{4} \times 7\frac{3}{4}$	21	<b>24</b> . <b>4</b> 8
50406	EJ	1500 to 1800	Wood covered .		$21\frac{1}{2}$	<b>24</b> . 48
50426	$\mathbf{E}\mathbf{K}$	1800 to 2400	Station	49 x 8 x $17\frac{1}{2}$	45	<b>46.08</b>
50427	$\mathbf{E}\mathbf{K}$	1800 to 2400	Wood Covered	49 x 13 x 15½	<b>5</b> 8	<b>46</b> .08

#### Direct Current Arc Arresters

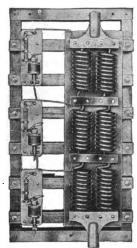
Standard types of Garton-Daniels Arc Circuit Lightning Arresters are listed below. These will meet practically all standard conditions. Arresters for higher voltages, or for special conditions, can be furnished to order.

#### Description and List Prices

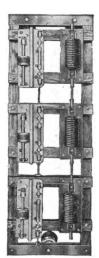
List No.	Туре	Voltage of Circuit	'Description	Net Weight Each	List Price Each
50077	BD BD BD BD	Up to 4000 Up to 4000 4000 to 6000 4000 to 6000	Station type Wood covered Station type Wood covered ed by	$\begin{array}{c} 6\frac{3}{4} \text{ lbs.} \\ 12\frac{1}{2} \text{ lbs.} \\ 20 \text{ lbs.} \\ 26\frac{1}{2} \text{ lbs.} \end{array}$	\$12.68 12.86 31.68 31.68

70 Protective Apparatus and Switchboard Accessories

#### GARTON-DANIELS LIGHTNING ARRESTERS



Panel Board for 600 Volt D. C. Railway Service. Front View



Panel Board for 2500 Volt A. C. Service. Front View



Side View of 2500 Volt A. C. Panel Board Showing Supporting Insulators

# Panel Board Types

Garton-Daniels Panel Board Arresters are especially designed for the protection of electrical machinery, either A. C. or D. C., where lightning conditions are unusually severe.

The line or feeder runs to the upper choke coil terminal while to the lower choke coil terminal is connected the feeder from the apparatus to be protected.

The upper lightning arrester unit is connected on the line side of the first choke coil; each of the other two being connected ahead of the other coils. These units are supplied with a common ground, the connectors being run in back of the two lower units as can be seen in the illustrations.

As to the operation of this arrester, assume that a charge has been set free on the line. The first choke coil chokes back most of this and discharges it over the first arrester unit. The leakage charge through the first choke coil must, as can be seen, pass two other choke coils before it can get into the apparatus. Almost perfect lightning protection therefore may be expected on apparatus protected with these panel board arresters.

These panel board arresters are designed especially for the protection of apparatus up to 6600 volts A. C., up to 2500 volts D. C., railway, and up to 6000 volts D. C., arc, and are furnished in any ampere capacity for voltages within this range.

They are made in double and triple type, one of either type being necessary for the protection of each wire running into or from the apparatus to be protected. They are furnished regularly for station use only, as operating companies usually desire to build small arrester houses to house them for outside installations.

Station panel boards are mounted on heavy impregnated oak frames and are furnished complete with insulators for their installation. The arrester units are furnished with highly polished and lacquered metal work. Choke coils are of copper, black enameled and baked.

#### DIRECTIONS FOR ORDERING

In ordering Garton-Daniels Panel Board Lightning Arresters, it is necessary that the following information be given:

Type desired—Double or triple.

Class of circuit—D. C. or A. C. If D. C., whether grounded or ungrounded, single, two or three wire. If A. C., whether single, two or three phase; two, three or four wire, grounded or ungrounded.

Voltage of circuit.

Amperes per wire in D. C. work or per phase in A. C. work.

Size of wire or cable for which terminals are to be provided, and number of terminals for heavy capacity circuits.

List Prices. For estimating purposes only, an approximate list price may be obtained on Garton-Daniels Panel Board Arresters by adding together the list prices of the arrester units suited for the voltage of circuit (two units for double type, three for triple type), the list price of suitable capacity, AF or AMF choke coils, and adding to this sum \$20.00. The list price so obtained will be approximate, and is subject to regular discounts.

# GARTON-DANIELS CHOKE COILS







AMF Choke Coll



Car Choke Coil

# Standard Types

Choke coils regularly carried in stock are listed below. Coils of higher ampere capacity than these will be furnished to order. In ordering choke coils always give the following information: manufacturer's number, capacity in amperes, size of wire or cable for which terminals are to be provided, number and size of terminals on each end when ordering type AMF coils, mounting, standard or special.

#### Description and List Prices

Lis <b>t</b> No.	Туре	Capacity	Dimensions in Inches	Net Weight Each	List Price Each
50042	S	10 Amp.	Diam. 65% x 21/2	4 lbs.	\$4.32
50043	Š	20 Amp.	Diam. $6\frac{5}{8} \times 2\frac{1}{2}$	4 lbs.	5.76
50044	8 .	30 Amp.	Diam. $6\frac{5}{8} \times 2\frac{1}{2}$	4 lbs.	6.92
50045	š	40 Amp.	Diam. $6\frac{5}{8} \times 2\frac{1}{2}$	4 lbs.	8.08
50046	8	50 Amp.	Diam. $8\frac{1}{8} \times 3\frac{7}{18}$	9¼ lbs.	9.60
50047	Š	100 Amp.	Diam. $8\frac{1}{8} \times 3\frac{7}{16}$	9¼ lbs.	10.20
50048	S	125 Amp.	Diam. $8\frac{1}{8} \times 3\frac{7}{16}$	9¼ lbs.	10.80
50049	$\tilde{\mathbf{s}}$	175 Amp.	Diam. $9\frac{5}{8} \times 3\frac{9}{16}$	16¼ lbs.	12.00
50050	S	225 Amp.	Diam. 95% x 3 14	161/4 lbs.	12.60
50051	8	260 Amp.	Diam. $9\frac{5}{8} \times 3\frac{9}{16}$	16¼ lbs.	13.20
11781	Car	75 Amp.	$10\frac{1}{2} \times 4\frac{3}{8} \times 4\frac{3}{4}$	8¾ lbs.	8.40
11782	Car	125 Amp.	$10\frac{1}{2} \times 4\frac{5}{8} \times 4\frac{3}{4}$	10 lbs.	9.32
11783	Car	150 Amp.	$10\frac{1}{2} \times 4\frac{3}{8} \times 5$	103/4 lbs.	10.20
11784	Car	175 Amp.	101/2 x 43 8 x 5	11½ lbs.	11.12
11785	Car	200 Amp.	$10\frac{1}{2} \times 4\frac{3}{8} \times 5$	12½ lbs.	12.00
50052	AF	50 Amp.	$10\frac{1}{2} \times 4\frac{3}{3} \times 5$	$8\frac{1}{2}$ lbs.	11.88
50053	$\mathbf{AF}$	125 Amp.	$10\frac{1}{2} \times 4\frac{3}{8} \times 5$	8½ lbs.	13.20
50054	AF	160 Amp.	12 x 5 x 5	11 lbs.	13.80
50055	AF	200 Amp.	12 x 5 x 5	$11\frac{1}{2}$ lbs.	14.28
50056	AF	250 Amp.	12 x 5 x 5	121/4 lbs.	14.52
50057	AF	325 Amp.	$5 \times 15\frac{1}{2} \times 4\frac{5}{8}$	$15\frac{1}{2}$ lbs.	15.84
50058	AF	400 Amp.	5 x 16 x 4 1 1 5	$18\frac{3}{4}$ lbs.	22.44
50059	AF	500 Amp.	$5 \times 16\frac{3}{8} \times 4\frac{15}{15}$	2:14 lbs.	33.00
50060	$\mathbf{AMF}$	600 Amp.	$10 \times 17 \times 4\frac{5}{8}$	33¾ lbs.	35.64
50061	$\mathbf{AMF}$	800 Amp.	$10 \times 18\frac{1}{2} \times 4\frac{11}{12}$	37¾ lbs.	42.24
500 <b>62</b>	$\mathbf{AMF}$	1,000 Amp.	10 $\times 20\% \times 4\frac{15}{8}$	48¾ lbs.	<b>59.40</b>
50063	$\mathbf{AMF}$	1,200 Amp.	$12 \times 22 \times 4\frac{5}{8}$	$65\frac{1}{2}$ lbs.	66.00
50064	$\mathbf{AMF}$	1,500 Amp.	$12 \times 22 \times 4\frac{15}{16}$	72 lbs.	80.52
50065	AMF	1,600 Amp.	14 $\times 23 \times 4\frac{11}{16}$	89¾ lbs.	89.76
50066	AMF	2,000 Amp.	14 x 23 x 4 15 Digitiza	102 lbs.	26.72
			72 Protective Apparatus	and Switchboard	Accessories

# GARTON-DANIELS GROUND FITTINGS AND ARRESTER HANGERS









Mfr. No. 50079

080 Mfr. No. 50081

Mfr. No. 50431

Light	Garton-Daniel	s Ground Fit	tings		
List No.	Description	Drilled for Wire	Dimensions in Inches	Net Wt, Each	List Price Each
	For Three-Quart	er Inch (3/4 in.) Pipe			
50079	Brass Cap	No. 4 or 6 solid	1 x 13/4 x 11/2	5 oz.	\$0.56
50428	Brass Cap	No. 0 cable or solid	1 x 2 x 1½	6 oz.	.56
50429	Brass Cap	1/4 in. cable	1 x 2 x 1½	6 oz.	.56
50080	Brass Coupling	No. 4 or 6 solid	15/8 x 13/4 x 13/8	5 oz.	.48
50430	Brass Coupling	No. 0 cable or solid	15/8 x 2 x 13/8	6 oz.	.48
50081	Malleable Point (external type)		$3\frac{1}{2} \times 1\frac{7}{16} \times 1\frac{7}{16}$	8 oz.	. 56
50431	Malleable Point (internal type)		23/4 x 1 x 1	7 oz.	.48
42292	Galvanized Pipe Tee		Standard 3/4 in.	10 oz.	.20
50440	Galvanized Pipe Coupling		Standard 34 in.	0.11.070	.20
50082	Gray Iron Plate		12 x 12 x 3/4	9 lbs.	1.44
	For One In	nch (1 in.) Pipe			1000
50432	Brass Cap	No. 4 or 6 solid	1 x 21/8 x 13/4	6 oz.	\$0.68
50433	Brass Cap	No. 0 cable or solid	1 x 21/4 x 13/4	7 oz.	.68
50434	Brass Cap	1/4 in. cable	1 x 21/4 x 13/4	7 oz.	.68
50435	Brass Coupling	No. 4 or 6 solid	111 x 21 x 134	8 oz.	.60
50436	Brass Coupling	No. 0 cable or solid	$1\frac{11}{16} \times 2\frac{3}{16} \times 1\frac{3}{4}$	8 oz.	.60
50437	Malleable Point (external type)		33/4 x 11/16 x 11/16	13 oz.	.68
50438	Malleable Point (internal type)		31/4 x 13/8 x 13/8	11 oz.	.60
50439	Galvanized Pipe Tee		Standard 1 in.		.24
50441	Galvanized Pipe Coupling		Standard 1 in.		.24
75.3	BONDS, CONNECTORS, *POLE BAN	NDS, GROUND WIL	RE DISCONNEC	TORS	
35 T	'vpe P4A Bond, No. 0 B & S Cable, 1/2 in.	terminal			\$79.20
36 T	Type O5A Bond, No. 0 B & S Solid, ½ in.	terminal		per 100	67.20
12346 C	Cylindrical Wire Connector for No. 4 or 6 I	3 & S Solid		each	.12
	Cylindrical Wire Connector for No. 0 B & S			each	.17
12342 (	Cylindrical Wire Connector for No. 0 B & S	S Cable		each	.32
50331 I	ron Pole Band for 65% in. pole			per doz.	15.60
50332 I	ron Pole Band for 75% in. pole		I	per doz.	15.60
50333 I	ron Pole Band for 85% in, pole			per doz.	15.60
50444 (	Fround Wire Disconnector for No. 4 or 6 B	& S Solid		each	1.52
*Po	le Bands include pole band brackets for att	taching to the regular	wood or iron cove	ers.	











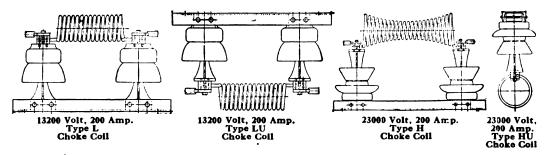
Style E

Style A

Garton-Daniels Lightning Arrester Hangers

### GARTON-DANIELS CHOKE COILS

#### HIGH VOLTAGE TYPES



### Garton-Daniels Choke Coils

Type L choke coils, as illustrated above, are designed for indoor service. The Type LU choke coils are of the underhung type and are designed particularly for outdoor service. The Type H choke coils are of the well-known "hour glass" type and are for indoor service. Type HU choke coils are of the underhung type and are designed particularly for outdoor service.

All types of choke coils listed are made with a base of channel iron, into which iron pins are riveted and insulators cemented to these pins support iron caps, which in turn support the terminal blocks and coil proper. Channel bases in all types are drilled with  $\frac{n}{16}$  inch holes in each end; the coil may so be mounted on any flat supporting member by bolts or lags; or by the use of pipe clamps described and listed in following pages they may be readily supported by piping.

List No.	Туре	Voltage	Capacity Amperes	List Price Each	List No.	Туре	Voltage	Capacity Amperes	List Price Each
50445	L	Up to 3000	50	\$20.40	50483	ĹÜ	3000 to 6600	400	\$36.00
50446	Ĺ	Up to 3000	100	21.60	50484	ĹŬ	3000 to 6600	500	39.60
50447	Ľ	Up to 3000	150	22.80	50485	ĹŬ	3000 to 6600	600	43.20
50448	Ĺ	Up to 3000	200	24.00	50486	Ĩ.Ŭ	3000 to 6600	800	48.00
50449	ĩ	Up to 3000	250	25.20	50491	ĹŬ	6600 to 13200	100	36.00
50450		Up to 3000	300	27.60	50492	ĽŬ	6600 to 13200	200	39.60
50451	ĩ.	Up to 3000	400	30.00	50493	ĹŬ	6600 to 13200	300	43.20
50452	L L L	Up to 3000	500	33.60	50494	ĪŪ	6600 to 13200	400	46.80
50453	Ī L	Up to 3000	600	37.20	50498	ĹÜ	13200 to 23000	100	42.00
50454	Ĺ	I'p to 3000	800	43.20	50499	LÜ	13200 to 23000	200	45.60
50455	L	Up to 3000	1000	55.20	50500	LU	13200 to 23000	300	49.20
50 <b>456</b>	L L L L	Up to 3000	1200	68.40	50503	LU	23000 to 35000	100	48.00
50469	L	<b>3000</b> to 6600	50	26.40	50504	LU	23000 to 35000	200	54.00
50470	L	3000 to 6600	100	28.80	50505	H	Up to 6600	50	28.80
50471	${f L}$	3000 to 6600	150	30.00	50506	Н	Up to 6600	100	31.20
50472	L	3000 to 6600	200	31.20	50507	Н	Up to 6600	150	32.40
50473	$\overline{\mathbf{L}}$	3000 to 6600	300	33.60	50508	H	Yp to 6600	200	33.60
50474	$\overline{f L}$	3000 to 6600	400	36.00	50509	H	Up to 6600	300	36.00
50475	Ľ.	3000 to 6600	500	39.60	50510	H	Up to 6600	400.	<b>37</b> . 60
50476	Ē	3000 to 6600	600	43.20	50511	H	Up to 6600	500	43.20
50477	L	3000 to 6600	800	48.00	50519	H	6600 to 13200	50	38.40
50487	Ŀ	6600 to 13200	100	36.00	50520	H	6600 to 13200	100	42.00
50488	L L L L	6600 to 13200	200	39.60	50521	H	6600 to 13200	200	45.60
50489	Îr	6600 to 13200	300	43.20	50522	H	6600 to 13200	300	43.80
50490	Γ̈́	6600 to 13200	400	46.80	50523	Ĥ	6600 to 13200	400	50.40
50495	Γ̈́	13200 to 23000	100	42.00	50529	H	13200 to 23000	100	44.40
50496	Ļ	13200 to 23000	200	45.60	50530	H	13200 to 23000	200	49.20
50497	Î.	13200 to 23000	300	49.20	50531	H	13200 to 23000	300	52.80
50501	Ļ	23000 to 35000	. 100	48.00	50535	H	23000 to 35000	100	51.60
50502	,L	23000 to 35000	200	54.00	50536	H HU	23000 to 35000	200	<b>57</b> .60
50457	LU LU	Up to 3000	50 100	20.40 24.60	50512		10p to 6600	50 100	28.80
50458 50459	ĽŬ	Up to 3000	150	22.80	50513 50514	HU HU	Up to 6600 Up to 6600	150	31.20 32.40
50460	ĽŬ	Up to 3000 Up to 3000	200	24.00	50515	йŬ	Up to 6600	200	33.60
50461	ĽŬ	Up to 3000	250 250	25.20	50516	HŬ	Up to 6600	300	36.00
50462	ĽŬ	Up to 3000	300	27.60	50517	ĤŬ	Up to 6600	400	39.60
50463	ĽŬ	Yp to 3000	400	30.00	50518	йŬ	Up to 6600	500	43.20
50464	ĹŬ	. Up to 3000	500	33.60	50524	йŬ	6600 to 13200	50	38.40
50465	ĽŬ	Up to 3000	600	37.20	50525	йù	6600 to 13200	100	42.00
50466	ĽŬ	Up to 3000	800	43.20	50526	йŬ	6600 to 13200	200	45.60
50467	ĽŬ	Up to 3000	1000	55.20	50527	нŬ	6600 to 13200	300	46.80
50468	ĽŬ	Up to 3000	1200	68.40	50528	йŬ	6600 to 13200	400	50.40
50478	ĽŬ	3000 to 6600	50	26.40	50532	йŬ	13200 to 23000	100	44.40
50479	ĹŬ	3000 to 6600	100	28.80	50533	йŬ	13200 to 23000	200	49.20
50480	ĨŬ	3000 to 6600	150	30.00	50534	йŬ	13200 to 23000	300	52.80
50481	ĽŬ	3000 to 6600	200	31.20	50537	ĦÙ	23000 to 35000	100	51.60
50482	ĽŬ	3000 to 6600	300	33.60	50538	HŬ	23000 to 35000	200	57.60
		2000 10 1030					_5000 00 00000		<b>3.</b> . 30

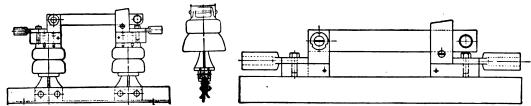
#### Directions for Ordering

In ordering choke coils and disconnecting switches it is necessary to give the following information in order that the coils may exactly meet requirements.

List number; voltage; capacity in amperes; size of wire or cable for which terminals are to be provided; number and size of terminals on each end when ordering Type AMF and High Voltage Coils; mounting—standard or special, and drillings in base, if other than standard drillings are required.

# GARTON-DANIELS DISCONNECTING SWITCHES

#### HIGH VOLTAGE TYPES



3000 Volts, 200 Amp., Type R Switch 13,200 Volts, 200 Amp., Type RU Switch

Type RM Switch, 200 Amp. Capacity

## Garton-Daniels Disconnecting Switches

All Type R disconnecting switches listed hereafter with the exception of Type RM are constructed with a base of standard channel iron. Iron pins are riveted to this base, and insulators cemented to these pins support iron caps, which in turn support the terminal blocks, terminals and switch proper. Each channel is provided with  $\frac{1}{16}$  inch holes at each end.

Switches are not furnished with switch locks, switch stops, etc., excepting Type RU which includes a

switch lock as standard equipment.

Type R is for indoor service while the Type RU of the underhung type is particularly for outdoor service.

Type RM has same switch structure as Type R, but is mounted on blue Vermont marble base and is for indoor service.

Directions for ordering are the same as for choke coils.

#### Description and Price List

		•		List	I				List
List		`	Capacity	Price	List			Capacity	Price
No.	Туре	Voltage	Amperes	Each	No.	Type	Voltage	Ampere 3	Each
50539	R	Up to 3000	100	\$13.80	50553	$\mathbf{RU}$	Up to 3000	600	\$33.60
<b>5</b> 0540	$\mathbf{R}$	Up to 3000	200	14.40	50554	RU	Up to 3000	800	40.80
50541	$\mathbf{R}$	Up to 3000	300	16.80	50555	$\mathbf{R}\mathbf{U}$	Up to 3000	1000	48.00
50542	$\mathbf{R}$	Up to 3000	400	19.80	50556	$\mathbf{R}\mathbf{U}$	Up to 3000	1200	<b>56.40</b>
50543	$\mathbf{R}$	Up to 3000	500	24.00	50573	RU	3000 to 6600	100	19.80
50544	$\mathbf{R}$	Up to 3000	600	28.80	50574	$\mathbf{R}\mathbf{U}$	3000 to 6600	200	20.40
50545	$\mathbf{R}$	Up to 3000	800	<b>36</b> .00	50575	$\mathbf{R}\mathbf{U}$	3000 to 6600	300	21.60
50546	$\mathbf{R}$	Up to 3000	1000	43.20	50576	$\mathbf{R}\mathbf{U}$	3000 to 6600	400	25.80
50547	$\mathbf{R}$	Up to 3000	1200	51.60	50577	$\mathbf{R}\mathbf{U}$	3000 to 6600	500	30.00
50566	$\mathbf{R}$	3000 to 6600	100	15.00	50578	$\mathbf{R}\mathbf{U}$	3000 to 6600	600	34.80
50567	$\mathbf{R}$	3000 to 6600	200	15.60	50579	$\mathbf{RU}$	3000 to 6600	800	42.00
50568	$\mathbf{R}$	3000 to 6600	300	18.00	50586	$\mathbf{R}\mathbf{U}$	6600 to 13200	100	21.60
50569	$\mathbf{R}$	3000 to 6600	400	21.00	50587	$\mathbf{R}\mathbf{U}$	6600 to 13200	200	22.80
50570	$\mathbf{R}$	3000 to 6600	500	25.20	50588	$\mathbf{R}\mathbf{U}$	6600 to 13200	<b>30</b> 0	25:20
50571	$\mathbf{R}$	3000 to 6600	600	30.00	50589	$\mathbf{R}\mathbf{U}$	6600 to 13200	400	<b>28.80</b>
50572	$\mathbf{R}$	3000 to 6600	800	37.20	50590	$\mathbf{R}\mathbf{U}$	6600 to 13200	500	33.60
50580	$\mathbf{R}$	6600 to 13200	100	16.80	50591	$\mathbf{R}\mathbf{U}$	6600 to 13200	600	39.60
50581	$\mathbf{R}$	6600 to 13200	200	18.00	50595	$\mathbf{R}\mathbf{U}$	13200 to 23000	100	30.60
50582	$\mathbf{R}$	6600 to 13200	300	20.40	50596	$\mathbf{R}\mathbf{U}$	13200 to 23000	200	31.80
50583	$\mathbf{R}$	6600 to 13200	400	24.00	50597	$\mathbf{R}\mathbf{U}$	13200 to 23000	300	33.60
50584	$\mathbf{R}$	6600 to 13200	500	<b>28</b> .80	50599	$\mathbf{R}\mathbf{U}$	23000 to 35000	200	43.20
50585	$\mathbf{R}$	6600 to 13200	600	34.80	50557	$\mathbf{R}\mathbf{M}$	Up to 2500	100	17.40
50592	$\mathbf{R}$	13200 to 23000	100	25.80	50558	$\mathbf{R}\mathbf{M}$	Up to 2500	200	18.00
50593	$\mathbf{R}$	13200 to 23000	200	27.00	50559	$\mathbf{R}\mathbf{M}$	Up to 2500	300	20.40
<b>5</b> 0594	$\mathbf{R}$	13200 to 23000	300	28.80	50560	RM	Up to 2500	400	23.40
50598	$\mathbf{R}$	23000 to 35000	200	38.40	50561	RM	Up to 2500	500	29.40
50548	$\mathbf{R}\mathbf{U}$	Up to 3000	100	18.60	50562	$\mathbf{R}\mathbf{M}$	Up to 2500	600	34.20
<b>5</b> 0549	$\mathbf{R}\mathbf{U}$	Up to 3000	200	19.20	50563	$\mathbf{R}\mathbf{M}$	Up to 2500	800	42.00
50550	$\mathbf{R}\mathbf{U}$	Up to 3000	300	21.60	50564	$\mathbf{R}\mathbf{M}$	Up to 2500	1000	50.40
50551	$\mathbf{R}\mathbf{U}$	Up to 3000	400	24.60	50565	$\mathbf{R}\mathbf{M}$	Up to 2500	1200	60.00
50552	$\mathbf{R}\mathbf{U}$	Up to 3000	500	28.80	Ì				

#### DISCONNECTING SWITCH FITTINGS

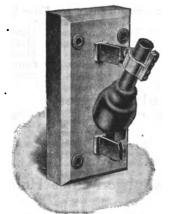
Garton-Daniels Disconnecting Switch Stops offer a means for readily preventing switch blades from being opened beyond a given angle. The stop consists of a brass casting so designed that it may be mounted on one of the rear switch wipes. The back of the blade in opening strikes a lug cast on the stop, and so the desired opening is secured.

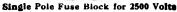
These stops are so designed that they may be mounted on the switch without extra machine work.

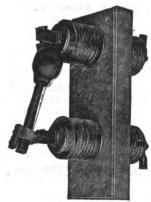
Garton-Daniels Switch Hooks consist of a well-seasoned wood pole fitted on the end with a metal ferrule and pin. This pin engages the blade in the hole provided for that purpose, and by this means the switches are opened and closed.

Prices on application.

### G. E. EXPULSION FUSES







Single Pole Fuse Block for 7500 Volts

# Expulsion Fuse Holders and Fuses

Type T, Form D-3

The TD-3 expulsion fuse is a simple and effective device for operating on overload and short circuit conditions.

Capacities 100 and 200 amperes 2500 and 7500 volts.

This fuse holder consists of a heavy insulated metal bulb or explosion chamber into which is screwed a fiber tube. At each end are contact blades and accessible binding screws for the fuse, the lower binding screw being carried on the screw plug in the "breech" of the explosion chamber.

The fuse proper which passes through the tube and bulb is made of comparatively small cross section at the lower end, to insure rupturing inside the bulb. The explosion and sudden expansion of gases expels the arc and fused metal and effectively opens the circuit.

There fuses are assembled in the form of compute fuse blocks single double and triple and trip

These fuses are assembled in the form of complete fuse blocks, single, double and triple-pole, both

2500 and 7500 volts, and four-pole for 2500 volts.

The clips for the 2500 volt fuse holders are mounted directly on marble base of panel, while those for the 7500 volt holders are mounted on one piece porcelain insulators, which in turn are mounted on slate base or panel.

Barriers are provided for the double, triple and four-pole fuse blocks on bases.

Single pole elements complete with contact clips, but without bases, are listed separately for panel mounting. The necessary barriers are also listed in the same way.

#### 100 Amperes, 2500 Volt Fuse Blocks

		8, 2500 YOIL	. ass Disca	. <b>.</b>							
No. of	1		Front	Connected	Back Connected						
Poles	Mounted	Barriers	List No.	List Price Each	List No.	List Price Each					
1 2	On Base	Without With	59443 59444	\$18.70 42.90	59447	\$19.80					
3	On Base	With	59445	27.10	59448 59449	45.10 70.40					
4	On Base	With	59446	91.30	59450	94.60					
ì	For Panel	Without			59451	13.20					
200 Amperes, 2500 Volt Fuse Blocks											
1	On Base	Without	59452	\$24.20	59456	\$26.40					
2 3	On Base	With	59453	58.30	59457	62.70					
3	On Base	With	59454	61.10	59458	96.80					
4	On Base	With	59455	91.30	59459	129.80					
	For Panel	Without	11		59460	19.80					
	100 Ampere	s, 7500 Volt 1	Fuse Block	:8							
1	On Base	Without	59461	\$24.10	59464	\$27.50					
2	On Base	With	59462	58.30	59465	64.90					
3	On Base	With	59463	80.00	59466	101.20					
1	For Panel	Without			11 59467	23.10					
	200 Ampere	s, 7500 Volt l	Fuse Block	:8							
1	On Base	Without	59468	\$31.90	59471	\$36.30					
2	On Base	With	59469	72.60	59472	82.50					
3	On Base	With	59470	113.30	59473	126.50					
1	For Panel	Without	<u> </u>		li 59474	l 28.60					

## G. E. EXPULSION FUSE HOLDERS

Sepa	rate Holder	s-Without F	1805	Single Barriers for Fuse Blocks					
•	Type T,	Form D-3	List Price		Rat	ing of Fuse	Block	List Price	
List No.	Volts	Amperes	Each	List No.	Volts	Amperes	Material	Each	
59475	·2500	100	\$7.70	75935	<b>25</b> 00	100	Marble	\$8.80	
59476	2500	200	13.20	75936	<b>2500</b>	200	Marble	11.00	
<b>59477</b>	7500	100	8.80	75937	7500	100	Slate	8.80	
59478	7500	200	14.30	75938	7500	200	Slate	8.80	
Prices o	on fuse holder	s 22,000 to 110,	000 volts on	application	١.				

Operating Hooks for Expulsion Fuses
The fuse holder may be easily removed from the clip by means of a suitable operating hook, which should always be used, thus eliminating danger to the operator.

Rating of Fuse Holder

List No.	Volts	Amperes	List Price Each
<b>45229</b>	2500 or 7500	<b>i00</b>	<b>\$</b> 3.30
45230	2500 or 7500	200	3.30

# Fuses for 2500 and 7500 Volt Expulsion Fuse Holders

Amp.					Amp.				
Con. Cur.					Con. Cur.				
Carrying	500 V	/olts	750	0 Volts	Carrying	2500 Volts		7500 Volts	
Cap.	List No.	List Price	List No.	List Price	Cap.	List No.	List Price	List No.	List Price
5	118572	<b>\$</b> 0.22	118594	<b>\$</b> 0.33	80	118583	<b>\$</b> 0.22	118605	<b>\$0.3</b> 3
8	118573	.22	118595	.33	90	118584	.22	118606	.33
10	118574	.22	118596	.33	100	118585	. <b>22</b>	118607	. 33
15	118575	.22	118597	.33	110	118586	.22	118608	. 33
20	118576	.22	118598	.33	125	118587	.22	118609	.33
25	118577	.22	118599	.33	140	118588	.22	118610	.33
30 ·	118578	.22	118600	.33	155	118589	.22	118611	.33
40	118579	.22	118601	.33	170	118590	.22	118612	.33
50	118580	.22	118602	.33	180	118591	.22	118613	.33
60	118581	.22	118603	.33	200	118592	.22	118614	.33
70	118582	.22	118604	.33					

Fuses are of special metal and have tubular asbestos coverings.

The ampere rating given is the normal carrying capacity of the fuse, and is about 60 per cent. of the load at which it will rupture.

# Fuse Holders, Complete with Fuses Type T, Form D 2 For Use with Potential Transformer Fuse Blocks

Distance Between

30.80

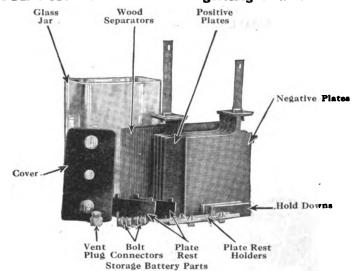
Fuse	Holders		Used with fuse blocks listed above, also with	Contact Clip	_	
List	Includes Fuse		potential transformers having fuse clips	Centers in	Approx. Ship.	List
No.	List No.	Volts	on transformer terminals	Inches	Wt. in Lb.	Price
121100	121101	6600	On transformer		3	<b>\$</b> 2.76
121074	121076	6600	Separate mounting	. 83/4	5	3.30
121074	121076	15000	Separate mounting	$8\frac{3}{4}$	5	3.30
121075	121077	15000	On transformer	. 111/2	5	3.86
121075	121077	22000	Transformer or separate		5	3.86
121075	121077	35000	Transformer or separate		10	3.86
60519	121078	45000	Transformer or separate	. 24	10	8.80
60519	121078	70000	Transformer or separate	. 24	15	8.80
Nот	E: Fuse holde	ers with f	use are included in List No. and List Price of			

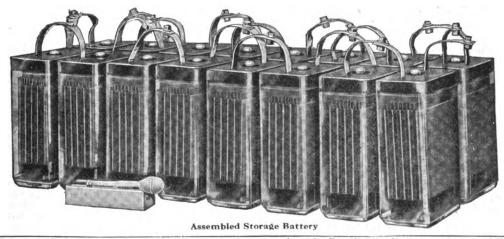
00019	121010 10000 1181181011116	er or separate	24 10	0.00
Nor	<b>E:</b> Fuse holders with fuse are include	ded in List No. and Lis	t Price of fuse blocks.	
/	FUSESW	ITH ASBESTOS CO	VERING	
T-D	-2 fuses 3300 to 15000 volts are reco			. Above
	olts the T-D-2 is suitable for 10,000			
List	= = = = = = = = = = = = = = = =	Length in	For Use in Fuse Holder	List
No.	Volts	Inches	List No.	Price
121101	*6600	9	121100	\$0.11
121076	t6600	131/4	121074	.11
121076	t15000	131/2	121074	.11
121077	*15000	16	121075	:11
121077	22000	16	121075	.11
121077	35000	16	121075	.11
121078	45000	30	60519	
				.17
121078	70000	30	60519	.17
		Clips		
List No.		Used on		List Price
60577	Front connected fuse block or on p	potential transformers		<b>\$</b> 0.22
60578	Back connected fuse blocks	- 		.22
	Operating Ho	ook for Handling Fu	se Holders	
112426	6600-15000 volts	<b>.</b>		<b>\$20.90</b>
60521	22000–35000 volts			28.60
112427	45000-75000 volts			30.80

Fuse hooks should always be used in removing or replacing fuse holders to avoid danger to operator. Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house.

112427

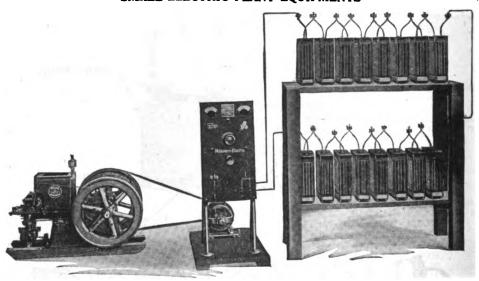
# STORAGE BATTERIES—For Lighting Plant Service





of Cell	of Plates		Size of	Plates	Outside Dimensions of Jar			Normal Charge Rate	Capacity in Ampere Hours When Dis- charged at Hour Rate Given Below			Range of Gravity of Electrolyte			Net Weight of Cell Complete	
Type of	No.	Width	Length	Pos.	kness	W. Jal	Length	Haiabi					Fully	Walf	Fully	
VALUE OF		Inches	Inches	Inches	Neg. Inches			Inches		8 Hr.	5 Hr.	3 Hr.	Charged		Dis'd	
WE R-44	5	5%	57/8	7 33	Inside Outside	Jar 2 Case 7½	Jar 63/8 Case 101/8	Jar 9 Case 934	5.5	44	40	36	1280	1230	1180	4 cell tray 54 lbs.
WE G-44	5	57/8	57/8	37	Inside Outside	Jar 4¼	Jar 75/8	Jar 101/4	5.5	44	40	36	1250	1233	1215	25½ lbs.
WE G-80	5	73/4	73/4	37	Inside Outside	Jar 311	Jar 9	Jar 1234	10.00	80	70	62	1250	1225	1200	38 lbs.
WE G-120	7	73/4	73/4	2,1	Inside Outside	Jar 3 116	Jar 9	Jar 123/4	15	120	105	93	1250	1210	1170	42 lbs.
WE G-160	9	73/4	73/4	37	Inside Outside	Jar 53/8	Jar 87/8	Jar 131/8	20	160	140	124	1250	1220	1185	5234 lbs.

# Western Electric SMALL ELECTRIC PLANT EQUIPMENTS



The time and money saving advantages of these powerful, built-for-business electric plant equipments will appeal to every practical man. They consist of a 16 cell storage battery, a switchboard and a generator.

These equipments are built to give real service and to win the enthusiastic praise of the owner, not only for a few days, but after years of use. They are built by engineers to win the approval of engineers, and the more critically and intelligently they are examined the more apparent is their value.

The generators are shunt wound, generate current at 32 to 42 volts. A sliding base is furnished so that the proper belt tension may be readily maintained. A pulley and spare set of brushes are included with each plant.

In ordering these plants the speed of the engine that will drive the generator and also the diameter of the flywheel in inches, must be given in order that a generator pulley of suitable diameter may be supplied

# Western Electric Lighting Plant Counter Cell Equipment

In a large majority of cases the engine and generator are run and the battery charged only in the daytime, and current for the lights during the evening hours is taken exclusively from the battery. This method of operation is by far the most convenient, and is the one for which the Standard type of switchboard is designed. In some few plants it may be desired to do a considerable amount of lighting while the battery is being charged. It may not be convenient to run the generator except during the evening hours, or it may be necessary to run a considerable number of lights during daylight hours.

To charge the battery requires a pressure higher than the normal lamp voltage, and if the lamps are burned habitually under this pressure they will be abnormally bright and their life reduced. When, therefore, it is necessary to burn many lamps and to charge the battery at the same time, it is customary to provide some means to reduce the charging voltage to the proper value for the lamps, which is approximately 32 volts.

To accomplish this, counter cells (resistance cells) may be connected in the lighting circuit while charging is being done, or a switch may be provided by means of which the lighting circuit may be temporarily connected to 13 cells of the battery instead of to the full battery of 16 cells.

Either of these arrangements requires the use of a special switch in addition to the switches provided on the Standard type switchboards. Such a switch is omitted from the Standard switchboard because it is not ordinarily required. When, however, the counter cell regulation feature is desired it can be easily obtained by adding the special switchboard required.

List No. of Plant	Capacity of Gen- erator in Amperes	Type of Power Board		of Storage Battery in Amp.	Will Light With Genera-	16 Candle Power Lamps,	12 Cand Lamps T	Vatt le Power 'hat Can ed From attery	Number of 20 Watts 16 Candle Power Lamps, That Can Be Lighted From One Battery Charge for 5 Hours per Day for 3 Days	List Prices Each
					Operating Together for 3 Hours		For 5 Hours	For 8 Hours		
5A- 50 5A- 90 7B- 90 7B-180 10B- 90 10B-180	15 15 20 20 30 30	A A B B B B	44 80 80 160 80 160	50 90 90 180 90 180	43 57 65 98 81 114	24 24 32 32 32 48 48	18 30 30 59 30	11 21 21 42 (21 42)	4 7 7 15 17	\$370.00 460.00 550.00 650.00 650.00 750.00

# Western Electric Western Electric

# TYPE "B" SWITCHBOARD

## **Volt Meter Switch**

Monson slate, oil polished and bevelled one inch thick; size 16 x 30 inches. Left Hand position shows generator voltage. Right hand position shows lighting voltage.

Western Electric

Battery charging instruction plate.

volt meter, diam. 43 in. for showing pressure of lights, generator and battery.

# Generator and Self Starting Switch

Placing this switch in the down position starts generator as a motor for cranking engine. Up position is the running position as a generator.

Generator fuse -

Contactor which automatically closes and opens connections between battery, generatorand line.

Enclosed in dust proof cover which further protects it from mechanical injury. Ampere meter diam. 43 in. shows charge and discharge of battery and generator load.

# Ampere Meter Switch with Laminated Contact

Will carry 100 amperes without heating. Position to left shows generator current. Position to right shows charge or discharge of battery.

Service switch for opening main circuit.

Service switch fuses.

Rear mounted field rheostat for regulating voltage of generator and charging rate of battery.

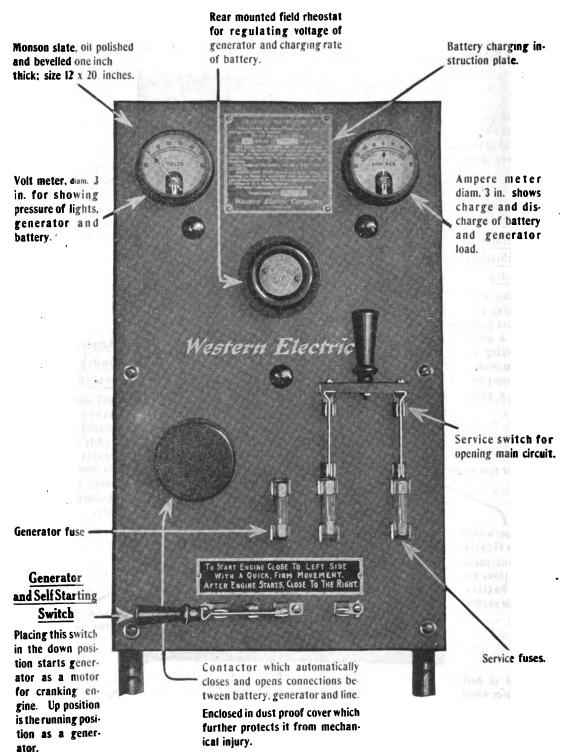
zed by Google

Type B Thirty Volt Board

# Western Electric

# Western Electric

# TYPE "A" SWITCHBOARD



Type A Thirty Volt Board zed by Google

SMALL LIGHTING F	PLANT ACCESSORIES
Power Switchboards	Power Switchboards with
List No. List Price	. Generators
AF-5 Switchboard for use with 500 watt, Type SD generator \$84.00	List No. List Price
AL-5 Switchboard for use with 500 watt, Type RC generator 84.00	AF-5 AF-5 or AL-5 switchboard with Type SD or Type RC 500 watt
B-7 & 10 Switchboard for use with 700 watt	generator
and 1050 watt, Type B and RC generators	volt generator 340.00
B-7 & 10 With counter cell switch 170.00	B-10 B-10 switchboard with 1050 watt, 35 volt generator, rheostat and
Standard Dattaria	sliding base 348.00
Standard Batteries	,
Rubber Cell 44 ampere hour, 8 hour rating, 32 volt battery (50	Batteries with Generators
ampere hour intermittent rating), 16 cell WER-44, Western Elec-	44 ampere hour, 8 hour rating, rub-
tric battery in 4 trays of 4 cells	ber or glass cell battery and 500
each, complete with hydrometer and instructions 182.00	watt generator with rheostat, pulley and base 310.50
Glass Cell 44 ampere hour, 8 hour	80 ampere hour, 8 hour rating, glass cell battery, 700 watt generator
rating, 32 volt battery (50 ampere hour intermittent rating),	with rheostat and base 434.00 160 ampere hour, 8 hour rating,
16 cell WEG-44, Western Electric battery in sealed glass jars,	glass cell battery and 1050 watt
complete with hydrometer and	generator with rheostat and base. 598.00
instructions 164.00	
Glass Cell 80 ampere hour, 8 hour rating, 32 volt battery (90 am-	Generator Pulleys
pere hour intermittent rating), 16 cell of WEG-80 Western	Cast Iron
Electric battery in sealed glass jars complete with hydrometer	Generator pulley, 2 to 5 in. diameter \$5.00
and instructions 244.00	Generator pulley, $5\frac{1}{2}$ to 6 in.
Glass Cell 160 ampere hour, 8	Generator pulley, 7 to $8\frac{1}{2}$ in.
hour rating, 32 volt battery (180 ampere hour intermittent rat-	diameter
ing), 16 cells of WEG-180, West- ern Electric battery in sealed	
glass jars complete with hydro- meter and instructions 400.00	Gas Engines Water Cooled
motor and motorocal firm according	Fuller and Johnson
Counter Cell_Equipment	HIT AND MISS GOVERNOR
Counter cell or end cell panel:	1½ H.P. magneto ignition \$115.00 1½ H.P. battery ignition 100.00
3 Type WER-44 CEMF cells (with packing)	1/2 Saves J - g
3 Type WEG-44 CEMF cells (with packing)	THROTTLING GOVERNOR
3 Type WEG-80 CEMF cells	3 H.P. magneto ignition
(with packing)	5 H.P. magneto ignition
(with packing)	7 H.P. magneto ignition 425.00
Datter Darks and Tables	7 H.P. battery ignition
Battery Racks and Tables	9 H.P. battery ignition
1A 16 cells WEG-44, 80 or 160 \$16.00 2A 16 cells WER-44 10.00	12 H.P. battery ignition 820.00
Automobile Starting and Light-	New Way Air Cooled Gas Engines
ing Battery Charging Panel	K-C-500-700 watt (magneto) \$190.00
1A Auto charging panel, wall type \$50.00	K-C-500-700 watt (battery) 168.00
Auto charging panel on B switch- board	Digitized by TT 70 10
Delivery F. O. B. Factory. For warehouse deli	veries write nearest nouse.

## LOW VOLTAGE ISOLATED PLANT ACCESSORIES

FOR USE WITH	30 VOLT PLANT
Paul Pumps	List No. Temco Drills List Price
SEE LISTING ELSEWHERE	See Model B with % in. chuck Listing Complete garage outfit Else-
32-Volt Motors	where
Information on application.	
Utility Motors	<b>V</b> ulcanizers
Information on application.	See Premier automatic electric vulcanizer Listing
Motion Picture Machines	Fremier automatic electric vulcanizer Else . where
E.M.P. and F. Motion Picture Ma-	***************************************
chine, 550 watts, weight 35 lbs \$300.00	Heating Devices
Sewing Machines	1 Western Electric flatiron, 500 watts,
Western Electric Type No. 1, 20 watts Western Electric Type No. 2, 20 watts 93.00	weight $6\frac{1}{2}$ lbs
Western Electric Type No. 3, 20 watts 113.00	3210 Disc heater, 450 watts, weights 1/4 lbs.
Sewing Machine Motor	5205 Water heater, 300 watts, weight 13/4 } Else
Jack Rabbit type\$30.00	bs
Dish Washer	weight 1¼lbs
Western Electric dish washer \$135.00	weight $2\frac{1}{2}$ lbs
Washing Machines	
Watt Shp. Capacity in List Type Used Wgt. Sheets or Shirts Price	Fixtures
AA Washer 230 227 4 or 8 \$150.00 A Washer 230 250 6 or 14 200.00	3A Unit Fixture Package. Contains: One 3 light chain shower)
AC Washer 230 250 6 or 14 250.00	One 2 light chain shower
B Washer 230 260 9 or 20 250.00 BC- Washer 230 260 9 or 20 300.00	One 1 light chain pendant Two 1 light chain wall
C Washer 230 275 12 or 30 330.00 CC Washer 230 275 12 or 30 390.00	Bracket with key socket One 1 light wall or ceiling fixture
Dolly Washer 230 212 6 or 14 120.00	chain socket
Fans	4A Unit Fixture Package. For hand use, contains four 1 light
With Cord and Plug 6 in. non-oscillating, 4 blades, 23	drop cord pendant with green metal shade
watts, net weight 4 lbs., shipping weight 5 lbs	4B Unit Fixture Package.
9 in. oscillating, 4 blades, 26 watts.	For barn and other outbuildings, contains four 1 light drop cord
net weight 47% lbs., shipping weight 10 lbs	pendant with canvasite cord, porcelain key socket and lamp
9 in. non-oscillating, 4 blades, 26 watts, weight 5¾ lbs., shipping	guard\$13.70
weight 10 lbs	
net weight, $17\frac{3}{4}$ lbs., shipping weight, $25$ lbs $54.00$	32 Volt Lamps Straight Side
12 in. non-oscillating, 4 blades, 35 watts, net weight 19 lbs., shipping	16 Cell, 28-32 Volt Mazda B Lamp
weight 25 lbs	Dia. Bulb Max. Base Std. List Price Watts In. Overall Supplies Pkg. Clear Frosted
net weight 25 lbs., shipping weight 40 lbs	5 134 4 Med. screw 100 \$0.54 \$0.60
Vocamen Classics	20 2½ 4½ Med. screw 100 .54 .60
No. Vacuum Cleaner 11 Vacuum cleaner with 122, 135 and	40 23/8 51/4 Med. screw 100 .54 .60
137 tools, 1/12 H.P., 115 watts \$80.00 11 With Nos. 122, 127 to 131, 135 and	10.0 % 20.00 % 15.5 % 25.
137 tools, 1/12 H.P., 115 watts 95.00	16 Cell, 28-32 Volt Mazda C Lamp
1 With extension cord and cleaning tool	50 2½ 5½ Med. screw 100 \$1.30, \$1.40 75 2¾ 6⅓ Med. screw 50 1.50 1.60
With 12ft. rubber hose and 20ft. cord. 195.00 Delivery F. O. B. Factory. For warehouse delivery	
• • • • • • • • • • • • • • • • • • •	5

### SMALL BATTERY CHARGING RECTIFIERS



The 2 Ampere Type Western Electric Tungar Rectifier



Interior View of 2 Ampere Tungar Rectifies

### Western Electric

Tungar Rectifier

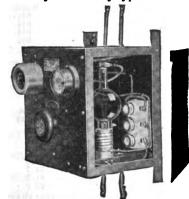
The Western Electric Tungar Rectifier offers one of the most satisfactory and efficient means for charging storage batteries from an alternating current circuit. The simplicity of the rectifier is one of its prominent features. It requires no auxiliary starting device—simply screw the Edison plug provided into any lighting socket, connect the batteries to the battery leads and the operation of charging automatically begins. There are no moving parts, nothing to keep oiled, so that the rectifier is absolutely clean and free

begins. There are no moving parts, nothing to keep offer, so that they do not require any floor or bench space.

The light weight of the rectifier is another of its advantages. The smaller sets may be hung on a nail, and all sizes can be mounted on a small shelf, so that they do not require any floor or bench space.

The Two and Six Ampere Size. (7½ to 15 Volts.) The two ampere size will charge, from a 115 volt 60 cycle circuit, 3 lead battery cells at 2 amperes; 6 cells at about 1 ampere, and 8 cells at about 0.75 amperes, and an intermediate number of cells in proportion. The cost of charging a 3 cell battery at 10 cents a K.W. hour for current, including the slight cost for tube renewals, is about 1 cent per hour, or 15 cents for an ordinarily complete charge. cents for an ordinarily complete charge.

They are the only type of rectifier to recommend and to use for charging batteries used for:



The Western Electric 6 Ampere, 75 Volts
Tungar Rectifier

Lighting Systems Used On: Ignition Systems On: Motorcycles Automobiles Bicycles Stationary gas Motorboats engines Tractors Carriages

Batteries for: Miners' lamps Dentists' lamps Exit lights Burglar alarm systems Railroad signals

Fire gongs, call bells, buzzers, telephones, experimental apparatus in public schools, factories, offices, hospitals, laboratories, etc.

The Six Ampere Size. (75 volts.) The six ampere size possesses the same important characteristics as the smaller type, but is particularly designed for commercial use in garages where automobile starting and lighting batteries are to be charged. The watt capacity of this set is 450 watts. No bulb life is guaranteed, but experience has shown that a bulb will last at least 500 to 600 hours.

### 105/125 VOLTS, 60 CYCLE ALTERNATING CURRENT CIRCUITS Complete Portable Rectifiers

								List
				No.				Price Each
List	D. C.	D.C.		Lead	<del></del> 1	Weight-	Retail	Lots of 6 on
No.	Amperes	Volts	Frequency	Cells	Net	Shipping	Price Each	One Order
195529	1-2	7½ to 15	60	3 to 6	8	12	\$16.00	\$21.30
198646	ī- <b>2</b>	$7\frac{1}{2}$ to 15	40-50	3 to 6	10	15	19.00	25.34
195530	6	$7\frac{1}{2}$ to 15	60	3 to 6	15	18	<b>24</b> .00	32.00
198647	6	$7\frac{1}{2}$ to 15	40-50	3 to 6	18	25	30.00	40.00
179492	6	75	60	3 to 30	50	70	115.00	<b>‡153.34</b>
198648	6	75	40-50	3 to 30	60	80	125.00	<b>‡166.70</b>
			R	enewal Bulb	8			
*195528					3 oz.	1 lb.	<b>\$</b> 3.00	<b>\$4</b> .80
**189048					8 oz.	2 lbs.	7.00	<b>‡11.20</b>
**189049	• • •				6 oz.	2 lbs.	8.00	<b>‡13.60</b>
				1 400040				NT 10FF00

\*This bulb to be used with Nos. 195529 and 198646 only. \*\*This bulb to be used with Nos. 195530 and 198647 only. \*\*\*This bulb to be used with Nos. 179492 and 198648 only. In lots of one. Delivery F. O. B. Schenectady, N. Y. For warehouse deliveries write nearest house.

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### MERCURY ARC RECTIFIERS

TYPE MS-FORM K





Fig. 1 Fig. 2 For Small Battery Charging Sets

This rectifier is a modification of the ignition battery set with the idea of making it portable. It may be carried around in the garage (not intended for carrying in automobiles), plugged in at any convenient receptacle, and charge batteries in gasoline automobiles. It is appreciated that most gasoline automobiles are now equipped with self starters and generators for charging batteries. However, a battery will give longer life and better results if given a soaking charge monthly, even though it is charged regularly on the machine. The soaking charge removes any sulphate that may be carried on the plates, outs down the internal resistance of the battery, and thus gives better service and longer life. Many cars are still unequipped with generators for charging, and have gas headlights. If owners of these cars had a rectifier at home where they could charge them once a week, many of them would put on electric lights and a storage battery of about 80 ampere-hours capacity which sould be charged generally during the night. An owner of such a car could better afford to equip it with electric lights than to buy a generator and attach it to his engine.

DESCRIPTION

DESCRIPTION

DESCRIPTION

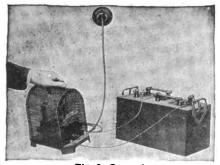
The rectifier consists of a metal base, on which are mounted the main reactance and a series alternating current reactance; and just above these, a tube holder containing a new type of rectifier tube, which is clearly shown in Fig. 2. The whole outfit is covered with a sheet metal cover. The alternating current supply is connected by means of a flexible lead and a separable attaching plug. The direct current is connected to two binding posts, distinctly marked (+) and (—).

The rectifier is designed for charging a maximum of 6 cells of battery from 110 volts alternating current. It is particularly designed for charging, starting, lighting and ignition batteries used in gasoline automobiles. The ignition and lighting batteries are generally of 3 cells, and starting batteries are generally of 3 or 6 cells. This means that one 3 cell, two 3 cell, or one 6 cell may be charged at a time. The rectifier has a characteristic of very nearly constant current. It may, in fact, be connected to a single cell of battery, and will charge it at a rate of approximately 6 amperes from a 110 volt supply. This rectifier can be furnished for 60, 50, 40, 30 or 25 cycle, 110 volt circuits. It can be used on voltages up to 130 volts and the current characteristics will be the same, only the current will increase as the alternating current voltage increases for a given number of cells.

The approximate dimensions of the rectifier are:

DIMENSIONS IN INCRES

		DIMENSIONS IN INCHES	
Frequency	Length	Height	Width
60	91/4	101/4	6%
40	914	101/4	654
30	914	111/2	6%
25	913	111/4	. 614



EFFICIENCY AND COST OF CHARGING

The following table gives the watts input, direct current amperes and watt efficiency of the rectifier under various conditions. It should be particularly noted that on short circuit the rectifier delivers only 6.5 amperes, so that there is very little chance of a customer having trouble

Number of Cells	A.C. Volts	A.C. Watts	D.C. Amperes	Per Cent. Efficiency
0	1 (	130	6.5	2.5
i	1 1	128	6.0	13.6
2	1 1	130	5.6	22.4
3	} 110 {	132	5.1	29.0
4		132	4.75	34.7
5	1 1	128	4.43	41.5
Ğ	1	128	4.05	45.0

It will be noted from this table that the watts input under all conditions is about 130. At 10 cents a kilowatt hour this means 1 cents per hour; or for an all night charge of 10 hours, 13 cents. If two 6 volt batteries are charged the cost would be 6 cents per battery. Ordinarily, the charge at a public garage for charging such a battery is about 50 cents for a 6 volt, 3 cell, or 75 cents for a 12 volt, 6 cell battery. In some cases it is higher.

**OPERATION** Figure 3 shows the rectifier connected to a 6 volt, 3 cell battery, with the alternating current line connected, and indicates also the method of starting. After the connections are made the rectifier is tipped slightly, as shown by means of the handle at the top. The rectifier should then require no further attention.

Where two 3 cell batteries are charged, they are connected in series; or if two small batteries, such as ignition batteries, and

a charging rate of only 2 or 3 amperes is required, they should be connected in multiple.

## D.C. AMPERES 5—D.C. VOLTS MAXIMUM 15 Will Charge 1 to 6 Cells of Lead Battery

List No.	A.C. Volts	Frequency	Weight Net	in Lbs. Ship.	Retail Price Each	List Price Complete withTube	Net Freight Must Eastern Zone	Be Added Central Zone	as Follows Western Zone
178596	110	133	15	42		<b>\$45.00</b>	\$0.60	\$1.50	\$3.50
179144	104	125	15	42		1 45.00	.60	1.50	3.50
171005	110	60	15	42	<b>\$25.00</b>	1 45.00	.60	1.50	3.50
18074 <b>7</b>	110	50	16	43		45.00	.60	1.50	3.50
171006	110	40	18	45		56.26	.60	1.50	3.50
171007	110	30	21	48	31.25	56.26	.60	1.50	3.50
171008	110	25	23	50	01.20	56.26	.20	.40	.60
			*RE	CTIFIER T	TUBE (SEE !	NOTE)			
171010	110	25-60	9 os.	2 lbs.	\$7.50	\$13.50			

\*\*Tubes are shipped to customers by parcel post.

Nors: This tube is suitable only for the rectifiers listed on this page and cannot be used on any other rectifier.

### Western Electric MULTIPLE MERCURY RECTIFIERS





Standard Battery-Charging Rectifier, 60 to 140 Cycles

Standard Battery-charging Set, 60-140 Cycles

The mercury arc rectifier is used for changing alternating to direct current, efficiently and economically. In the new design rectifier listed below the compensating reactance is used in a modified form having no taps except the neutral point and consequently no dial switch, and simply serves the purpose of furnishing a neutral point for the negative side of the direct current and also gives the reactive effect necessary to keep the rectifier tube operating during the time which the alternating current takes to cross the zero line.

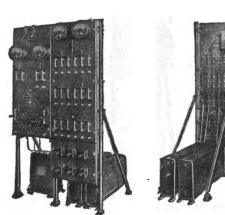
With Instruments

200	- Columbia			With	Instrun	nents		1 11	1	154
List No.	D.C. Amp.	Range D.C. Volts	A.C. Volts	List No. Rectifier Tube	Volt- meter Scale	Ammeter Scale	Cells Lead Battery	Cells Edison Battery	Approx. Ship. Wt.	List Price One Tube Only
148216	10 {	10- 75 20- 75	110 220	} 40949	75	15 {	5-30 10-30	7-40 14-40	} 530	\$374.00
148217	20 {	10-75 $20-75$	110 220	} 40952	75	30 {	5-30 . 10-30	7-40 14-40	} 540	419.90
148218	30 {	10-75 $20-75$	110 220	} 40955	75	40 {	5-30 10-30	7-40 14-40	} 590	504.90
148219	40 {	10-75 $20-75$	110 220	} 40958	75	60 {	5-30 10-30	7-40 14-40	} 635	535.50
148220	50 {	10- 75 20- 75	110 220	} 47409	75	60 {	5-30 $10-30$	7-40 14-40	660	557.60
148221	10 {	10-100 20-120	110 220	} 40949	120	15 {	5-38 $10-46$	7-54 14-65	} 530	374.00
148222	20 {	10-100 $20-120$	110 220	} 40952	120	30 {	5-38 10-46	7-54 14-65	} 540	419.90
148223	30 {	10-100 20-120	110 220	} 40955	120	40 {	5-38 10-46	7-54 14-65	} 590	504.90
148224	40 {	10-100 20-120	110 220	} 40958	120	60 {	5-38 10-46	7-54 14-65	635	.557.60
148225	50 {	10-100 20-120	110 220	} 47409	120	60 {	5-38 10-46	7-54 14-65	} 660	374.00
148226	10	75-175	220	40950	175	15	32 - 68	54-95	530	430.00
148227	20	75-175	220	40953	175	30	32-68	54-95	540	482.80
148228	30	75 - 175	220	40956	175	40	32-68	54-95	590	540.60
148229	40	75-175	220	40959	175	60	32 - 68	54-95	635	569.50
148230	50	75-175	220	119431	175	60	32-68	54-95	660	589.90
Managh 8				Without	Instru	uments		160		LYGUS
148231	10 {	10-100 20-150	140 220	} 40949	••••	{	5–38 10–56	7-54 14-80	3530	\$328.10
148232	20 {	10-100 20-150	110 220	} 40952	• • • •	{	5–38 10–56	7-54 14-80	} 540	374.00
148233	30 {	10-100 20-150	110 220	} 40955	344	{	5-38 10-56	7-54 14-80	} 590	459.00
148234	40 {	10-100 $20-150$	110 220	} 40958		{	5-38 10-56	7-54 14-80	} 635	489.60
148235	50 {	10-100 20-150	110 220	} 47409		{	5-38 10-56	7-54 14-80	}660	511.70
148236	10	75-175	220	40950		RELITIES	32-68	54-95	530	384.20
148237	20	75-175	220	40953		1201.78	32-68	54-95	540	436.90
148238	30	75-175	220	40956		60473	32-68	54-95	590	494.70
148239	40	75-175	220	40959		90175	32-68	54-95	635	520.20
148240	50	75-150	220	119431		- 00870	32-68	54-95	660	544.00
402	Town F	Y	0-1	+ N 1			- 1 - 15-ward	1 31 40	1000	011.00

Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house.

17 Rectifiers, Storage Batteries and Lighting Plants

### MULTIPLE MERCURY RECTIFIERS







Public Garage Type Rectifier

Rectifier for Moving Picture Machines

### Mercury Rectifiers **PUBLIC GARAGE TYPE**

List	D.C.	A.C.	Description	Approx. Ship.	List
No.	Amperes	Volts		Wt. Lbs.	Price
104996 73303	40 40	220	Complete rectifier d.c. volts, 45 to 230 6 circuit subbase		\$1292.00 127.00

List No. 104996 includes one List No. 40959 rectifier tube but does not include List No. 73303 subbase.

### MULTIPLE MERCURY RECTIFIER TUBES

List No.	D.C. Amperes	D.C. Volts	D.C. Voltage Range	List Price	List No.	D.C. Amperes	D.C. Volts	D.C. Voltage Range	List Price
40949 40950 40952 40953 40955	20	100 200 100 200 100	1-150 75-350 1-150 75-350 1-150	\$18.70 22.10 28.90 35.70 35.70	40958 40959 47409	30 40 40 50 50 6	200 100 200 100 200	75-350 1-150 75-350 1-150 75-350 1-15	\$44.20 54.40 62.90 62.90 71.40 12.76

### For Moving Picture Machines

 $VOLTAGE \left\{ \begin{array}{l} 45/70 \ DIRECT \ CURRENT \\ 110/220 \ ALTERNATING \ CURRENT \end{array} \right.$ 

### NORMAL FREQUENCY 60 CYCLES—FREQUENCY LIMITS 50-125 CYCLES

List	D. C.	List No. Rect.	Ammeter	Shpg.	List Price
No.	Amps.	Tube	Scale	Wt.	Each
172698	30	40958	*	425	\$402.90
172699	30	40958	60	425	426.70
172700	40	47409	*	500	493.00
172701	40	47409	60 •	500	516.80
172702	50	47409	*	550	<b>572</b> .90
172703	50	47409	60	550	. 596.70

### NORMAL FREQUENCY 25 CYCLES—FREQUENCY LIMITS 25-40 CYCLES

List No.		D. C. Amps.	List No. Rect. Tube	Ammeter Scale	Shpg. Wt.	List Price Each
172704		30	40958	•	425	\$503,20
172705		30	40958	60	425	527.00
172706	•	40	47409	*	500	617.10
172707		40	47409	60	500	640.90
172708		50	47409	*	550	714.40
172709		50	47409	60	550	741.20

Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house.

Rectifiers, Storage Batteries and Lighting Plants 18 & 20

List Nos. include only one tube.

\*Rectifier tubes will not be sold except with complete rectifier sets or for renewal purposes on G. E. rectifier sets already installed. The above prices include boxing.

### MULTIPLE MERCURY RECTIFIERS







Without Instruments

Runabout Type Rectifier

### Runabout Type—Normal Frequency, 60 Cycles

This outfit consists of panel, rectifier tube, regulating reactance and compensating reactance. The rectifier panel is 16 inches by 28 inches, and on it is mounted a double pole switch, single pole circuit breaker, a starting switch with auxiliary starting anode switch and an eleven-point regulating switch.

WITH	DK-5	INST	<b>TRUN</b>	MENTS
------	------	------	-------------	-------

List No.	D.C. Amp.	Range D.C. Volts	A.C. Volts	Mfr. No. Rectifier Tube	Ammeter Scale	Voltmeter Scale	Cells Lead Battery	Cells Edison Battery	Approx. Ship. Wt.	List Price Each
124672	30 {	30- 82 30-118	110 220	} 40955	40	120 {	20-32 20-46	25-44 25-60	<del></del>	\$484.50
124673	40 {	30- 82 30-118	110 220	<b>}</b> 40958	60	120 {	20-32 20-46	25-44 25-60	<b>610</b>	516.80
124674	50 {	30- 82 30-118	110 220	} 47409	60	120 {	20-32 20-46	25-44 25-60	} 670	544.00
			WI	THOUT	INSTRUM	1ENTS				
124675	30 {	30- 82 30-118	110 220	} 40955		{	20-32 20-46	25-44 25-60	550	\$438.60
124676	40 {	30- 82 30-118	110 220	} 40958		{	20-32 20-46	25-44 25-60	} 600	470.90
124677	50 {	30- 82 30-118	110 220	} 47409		{	20-32 20-46	25-44 25-60	650	498.08
				MODIF	IED TYP	E				
195584	30 30 30 30 30	30-118   30-118   30-118   30-118	220 220 220 220 220	40958 40955 40958 40955	* 60 60	120 120	38-46 38-46 38-46 38-46	54-60 54-60 54-60 54-60	540 540 560 560	\$336.60 336.60 382.50 382.50

List Nos. include only one tube.

### Battery-charging Sets—25-60 Cycles

This outfit consists of 1 rectifier tube, 1 compensating reactance, 1 regulating reactance, 1 rectifier panel. The panel is 31 x 16 x 1½ inches. The power factor of these outfits will be about 80 to 85 per cent.

SPECIAL RECTIFIERS—BATTERY-CHARGING TYPE NORMAL FREQUENCY, 25 CYCLES—FREQUENCY LIMITS, 25-60 CYCLES

	,					
115683 8-30 {   15- 4 46- 7		40	75	$\left\{ \begin{array}{c c} 8-17 \\ 22-28 \end{array} \right.$	$\begin{bmatrix} 9-25 \\ 38-40 \end{bmatrix}$ 6	\$632.40
115685 8-30 $\left\{ \begin{array}{c} 15-4 \\ 45-12 \end{array} \right.$		40	120	$\left\{ \begin{array}{c c} 8-17 \\ 22-46 \end{array} \right.$	$\left[\begin{array}{c} 9-25 \\ 38-64 \end{array}\right] \} \ \ 6$	640 632.40
115687 $10-40 \left\{ \begin{array}{c} 15-4 \\ 45-7 \end{array} \right.$		60	75	$\left\{ \begin{array}{c c} 8-17 \\ 22-28 \end{array} \right.$	$\left[\begin{array}{c}9-25\\38-40\end{array}\right]$ 6	669.80
115689 $10-40 \left\{ \begin{array}{c} 15-4 \\ 45-12 \end{array} \right.$		60	120	$\left\{ egin{array}{c} 8-17 \\ 22-40 \end{array}  ight.$	$\left[\begin{array}{c} 9-25 \\ 38-64 \end{array}\right] \} 6$	669.80
115691 $15-50 \left\{ \begin{array}{c} 15-4 \\ 45-7 \end{array} \right.$	$\begin{bmatrix} 5 & 110 \\ 5 & 220 \end{bmatrix}$ 47409	60	75	$\left\{ \begin{array}{c c} 8-17 \\ 22-28 \end{array} \right.$	$\left \begin{array}{c} 9-25 \\ 38-40 \end{array}\right \right\} \ 7$	20 697.00
115693 $15-50 \left\{ \begin{array}{c} 15-4 \\ 45-12 \end{array} \right.$		60	120	8-17 22-46	$\left \begin{array}{cc} 9-25 \\ 38-64 \end{array}\right  \right\} 7$	20   697.00

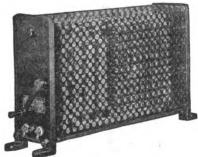
List Nos. include only one tube.

When operated on 125 cycles the voltages given on this page will be about 15 per cent lower.

Delivery F. O. B. Factory, Schenectady, N. Y. For warehouse deliveries write nearest house. 19

## Western Electric

### BATTERY CHARGING RHEOSTATS



CR-9200 Battery Charging Rheostat

### DESCRIPTIVE AND GENERAL

For charging automobile or other small batteries from circuits not exceeding 125 volts, we recommend the new CR-9200 battery charging rheostat. In order to meet more exactly the variety of charging conditions due to the different types and number of cells used in vehicle batteries, the previous line has been expanded. The rheostat is of very rugged construction, the frame being made of two iron castings which form the ends and which are fastened together with tie rods. A perforated sheet metal enclosing cover, which is easily removable, prevents accidental contact with live parts, but at the same time provides for ample ventilation.

A dial switch is entirely enclosed.

The cover is easily removed, allowing complete inspection and access to all parts.

Large number of contacts insures close regulation.

Can be placed on floor, wall or switchboard.

Large number of sizes standardized.

Rheostats have been designed for use where it is desired to charge Edison batteries above their normal rate. The resistance is so proportioned that any charging rate from double normal to normal may be obtained.

### CR-9200 Battery Charging Rheostats

List	Type of	No. of	Resista	nce	Chargin	g Amperes	No. of	Approx. Ship. Wt.	List	
No.	Čells	Cells	Permanent	Total	Start	Finish	Steps	Ship. Wt. in Lbs.	Price	
	·	FOR	CHARGING	AT NORM	AL RAT	E ONLY				
125953	Lead	12-18	3.6	17.0	1 15	5	15	1 140 1	\$60.0	
125954	Lead	12-18	2.75	17.0	20	6	15	140	66.0	
125955	Lead	20-28	1.85	13.0	20	5	15	140	66.0	
125956	Lead	20-28	1.7	9.0	25	8	15	140	70.0	
125957	Lead	30-36	.46	4.0	30	10	15	180	60.0	
125958	Lead	30-36	.4	4.0	40	10	15	160	60.0	
125959	Lead	37-40	.345	2.6	30	10	15	170	54. (	
125960	Lead	37-40	.24	2.6	40	10	15	180	54.0	
125961	Lead	41-44		1.5	30	10	15	160	48.0	
125962	Lead	41-44		1.5	40	10	15	160	48.0	
125963	Lead	41-44		1.28	50	12	15	160	54.0	
125964	Lead	41-44		1.0	60	15	14	160	54.0	
125965	Edison A- 4	20-40	.8	2.8	30	30	15	170	56.0	
125966	Edison A- 4	44-60		1.7	30	30	15	150	50.0	
125967	Edison A- 6	20-40	.64	2.0	45	45	15	170	52.0	
125968	Edison A- 6	44-60		1.2	45	45	15	160	48.0	
125969	Edison A- 8	20-32	.68	1.4	60	60	14	180	66.0	
125970	Edison A- 8	36-44	.44	1.0	60	60	14	170	56.0	
125971	Edison A- 8	48-60	****	.72	60	60	14	160	54.0	
127052	Edison A-10	20-32	.60	1.17	75	75	10	180	84.0	
127053	Edison A-10	36-44	.36	.81	75	75	10	180	74.0	
127054	Edison A-10	48-60		. 60	75	75	10	170	66.0	
127055	Edison A-12	20-32	.56	.96	90	90	10	185	84.0	
127056	Edison A-12	36-44		. 68	90	90	10	180	74.0	
127057	Edison A-12	48-30		.48	90	90	10	170	68.0	

### FOR CHARGING AT EITHER NORMAL OR DOUBLE NORMAL RATE Private Garage

134605	Edison A- 4	60	 .56	60	30	14	150	\$52.00
134606	Edison A- 6	60	 .34	90	45	14	175	52.00
134607	Edison A- 8	60	 .26	120	60	10	175	74.00
157718	Edison A-10	60	 .28	150	75	14	180	90.00
157719	Edison A-12	60,	 .255	180	90	15	180	96.00

### Public Garage

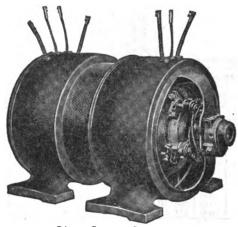
157720 134611	Edison A-4, 6, 8, 10, 12 Edison A-4, 6, 8	60 60	::::	.535 .63	180 120	30 30	16 10	190 200	\$96.00 80.00
149937	Edison A-8-10, 12	60		.265	180	60	10	180	86.00
157721	Edison A-10, 12	60		.235	180	75	15	180	104.00

### Western Electric

### COMPENSARCS FOR MOVING PICTURE ARC LAMPS



Alternating Current Compensarc



Direct Current Compensarc

### Alternating and Direct Current Compensarcs

### ALTERNATING CURRENT COMPENSARCS

### General Mechanical Construction

The compensare is a transforming device built with special reference to operating an alternating hand-feed are lamp such as used with picture machines, requiring approximately 35 volts across the arc and a steady current of from 30 to 60 amperes.

The construction of this device is very substantial and embodies all the careful features of design and finish that is carried out in our standard lines of transformers.

### Electrical Characteristics

The following embodies some of the principal characteristics of the alternating current compensare:

The device has an electrical characteristic which enables it to hold the arc steady at predetermined current values through a considerable range in the length of the arc.

The current value at short circuit is such that it will not blow the fuse, providing the fuse has a capacity slightly in excess of the normal operating current.

It is highly efficient, having low core loss and copper loss, resulting in a low operating temperature.

Each of the three adjustments of the switch is so designed that in short circuiting from step to step the circuit is at no time open. This obviates flickering at the lamp.

The power factor of the current operating lamp is as high as can be obtained and at the same time maintain the stability at the arc which is necessary for steady pictures.

### Connections

The compensare is a self-contained device and requires no auxiliary rheostat or other controlling mechanisms. Through the top of the cover of the compensare four leads are brought through porcelain bushings, two of which are marked "Lamp," and these should be connected to the lamp terminals. The other two should be connected to the operating circuit or line. No other connections are necessary.

As this is an alternating current device, there are no positive or negative wires.

### DIRECT CURRENT COMPENSARCS

In communities where direct current is supplied to moving picture houses, rheostats are generally used to cut down the line voltage to the required voltage at the arc. This is, of course, a very inefficient method and in such cases the direct current compensare should be sold. This device consists of a direct current motor built to operate on direct current circuits of 115, 230 or 500 volts, directly connected to a direct current generator which cuts down the voltage to the voltage required at the arc, approximately 55 volts. This device shows a very good efficiency and is a very economical device as compared with the rheostat.

### General Mechanical Construction

The direct current compensare is constructed by using two frames connected together by means of a special casting. The sets have two bearings, two field frames and two armatures. The armatures are mounted on one shaft. The sets are not furnished with a subbase.

### **Electrical Characteristics**

The electrical characteristics are similar to those of the ordinary direct current balancer sets. However, each frame is equipped with special windings, so as to give a volt ampere characteristic curve, such that when the current at the arc reduces, the voltage increases, thus insuring a stable arc. These results are obtained without using any lamp steadying remistance. On account of the characteristics of the set, if carbons are held in contact, the mains are not short circuited. The field rheostat can be adjusted to deliver the arc current from 20 to 45 amperes, approximately. These sets are designed on the basis of an arc consumption of 35 amperes, 50 volts.

### Connections

The motor end of each set will have three terminals, and the same procedure will be followed in connecting up as in a shunt wound motor, the middle lead being the lead from the field coils, the two outside being for the main line leads.

The generator end will be equipped with two leads for connecting direct to the arc lamp.

In addition to this, two small leads from the two inner bushings are connected direct to a closed circuit rheostat, which rheostat is to be used for adjusting the current of the arc.

Note: See following page for prices.

T :-- D-:---

### Western Electric

COMPENSARCS (CONTINUED)

### Alternating Current Type A, Form 4

		LIST Price	and Pata		
List No.	K.W.	Volts	Cycles	Shpg. Wt.	List Price
94312	2	110	60	160	\$88.00
94314	2	110	133	155	88.00
94316	2 2	110	50	160	88.00
97295		110	<b>4</b> 0	170	88.00
94313	214	220	60	180	105.60
94315	214	220	133	175	105.60
94317	214	220	50	180	105.60
97297	21/2	220	40	190	105.60

For Compensarcs equipped with ammeter, add \$26.40 list to above prices.

Note: Compensarcs can be built for any three specified ratings of current at 35 volts at the arc. Standard rating of 30.40-60 amp. 35 volts should be furnished wherever it is possible.

## D.C. to D.C. Compensarcs 35, 50 AND 75 AMP. OUTFIT FOR ONE ARC LAMP ONLY, 50 AND 75 AMP. OUTFIT FOR TWO LAMPS ALTERNATELY

35 Amp. for One Lamp Only 50 Amp. for One Lamp Only				75 Amp. for One Arc Lamp Only			50 Amp.for Two 35 Amp. Lamps Alternately			75 Amp. for Two 50 Amp. Lamps Alternately				
List No.	Aprx. Shpg. Wt. in Lb.	List Price	List No.	Aprx. Shpg. Wt. in Lb.	List Price	List No.	Aprx. Shpg. Wt. in Lb.	List Price	List No.	Aprx. Shpg. Wt. in Lb.	List Price	List No.	Aprx. Shpg. Wt. in Lb.	List Price
94511 94512 94513	520 640 1000	\$349.70 390.84 524.46	191250	625 985 1000	\$401.10 493.68 575.96	191365	700 1000 1460	\$524.46 627.34 771.38	191292	600 900 1050	\$514.26 637.66 678.80		700 1000 1460	\$637.66 740.52 884.52

# A.C. to D.C. Compensarcs 35, 50 AND 75 AMP. OUTFIT FOR ONE ARC LAMP ONLY, 50 AND 75 AMP. OUTFIT FOR TWO LAMPS ALTERNATELY 60 Cycles—1800 R. P. M.

			*35 Amp. for One Arc Lamp Only			*50 Amp. for One Arc Lamp Only			5 Amp. One Ar amp Or	c	†50 Amp for Two 35 Amp. Are Lamps Alternately			Two	‡75 Amp. for Two 50 Amp. Are Lamps Alternately		
Voltage	Phase	List No.	Aprx. Shpg. Wt. in Lb.	List Price	List No.	Aprx. Shpg. Wt. in Lb.	List Price	List No.	Aprx. Shpg. Wt. in Lb.	List Price	List No.	Aprx. Shpg. Wt. in Lb.	List Price	List No.	Aprx. Shpg. Wt. in Lb.	List Price	
110 220 440 550	3	190411 190412 190413 190414	580 580 580 580	380.54	190422	910	483.40	191344 191345 191346 191347	1100	\$606.80 606.80 606.80 606.80	190432 190433	1000 1000 1000 1000	586.24	191239 191240 191241 191242	1100 1100	\$719.96 719.96 719.96 719.96	
110 220 440 550	2 2	190415 190416 190417 190418	580 580 580 580	380.54 380.54	190425 190426 190427 190428		483.40	191348 191349 191350 191351	1100	606.80 606.80 606.80 606.80	190437	1000 1000 1000 1000	586.24 586.24	191243 191244 191245 191246	1100 1100	719.96 719.96 719.96 719.96	
110 220		190419 190420	650 650		190429 190430			191352 191353		771.38 771.38		1065 1065	678.80 678.80	191247 191248		884.52 884.52	

## A.C. to D.C. Compensarcs 35, 50 AND 75 AMP. OUTFIT FOR ONE ARC LAMP ONLY, 50 AND 75 AMP. OUTFIT FOR TWO LAMPS ALTERNATELY 25 Cycles

110 220 440 550	3	191295 191296 191297 191298	600 600 600 600	\$442.26   191305 442.26   191306 442.26   191307 442.26   191308	1000 1000	\$565.68 191354 565.68 191355 565.68 191356 565.68 191357	1300 1300	750.80 191316 750.80 191317	1050 1050	\$699.38191325 699.38191326 699.38191327 699.38191328	1300 1300	863.94 863.94
110 220 440 550	2	191299 191300 191301 191302	600 600 600	442.26 191309 442.26 191310 442.26 191311 442.26 191312	1000	565.68 191358 565.68 191359 565.68 191360 565.68 191361	1300 1300 1300 1300	750.80 191320 750.80 191321		699.38 191330 699.38 191331	1300	863.94 863.94 863.94 863.94
110 220	1	191303 191304	700 700	575.96 191313 575.96 191314		884.52 191362 884.52 191363		1038.78 191323 1038.78 191324		966.78191333 966.78191334		1170.62 1170.62

### Panels to Control 35, 50 and 75 Amp. Outfits For One Arc Lamp Only

					t Prices
			Shpg. Wt.		With
Cycles	Amperes	List No.	in Lbs.	Separate	Compensare
60	35	190439	40	<b>\$72</b> .00	<b>\$</b> 61.70
25	35 ე	190440	75	82.28	72.00
60-25	50 Ì	191367	75	82.28	72.00
60-25	75 ′				

\*List Nos. include compensare complete including \begin{cases}
35 ampere EF3 gen. and 3 H.P. motor. \
50 ampere EF5 gen. and 5 H.P. motor. \
75 ampere EF5 gen. and 7½ H.P. motor. \
16 starting compensator is necessary add for 60 cycle outfit. \$92.56 to the net retail price for all voltages except 110, to which add \$102.86; for 25 cycle outfit add \$123.42 and \$133.70 respectively. Digitized by

Teach (1997) And Teach (1997) Inc. For warehouse deliveries write nearest house.

### GOLDEN GLOW MARINE SEARCHLIGHTS







Type RDS-54

Type SDS-96 and SDS-128. Type D Control

### Marine Searchlights TYPES DDS-54 AND RDS-54

Types DDS-54 and RDS-54 are both equipped with 5 inch "Golden Glow" reflectors and differ only in that the Type DDS-54 is mounted on a stand for installation on the deck of small craft, while the Type RDS-54 is fitted with a bracket extension for installation on the rail or bulkhead. They are equipped with Type S lamp bodies with all metal parts of brass.

Both types are fitted with handle for directing the lamp and with suitable adjustment for securing the

lamp proper in any desired position when not in use.

They are furnished in standard and special finishes as listed below. Prices do not include Mazda lamps.

			Maximum	Total	List
			Diameter	Height	Price
Type	Control	Finish	Ins.	Ins.	Each
DDS-54	Type D, deck	All black enamel	7	12	\$40.00
DDS-54	Type D, deck	Black body and stand with nickel trim	7	12	40.00
DDS-54	Type D, deck	Black body and stand with brass trim	7	12	40.00
<b>DDS-54</b>	Type D, deck	All polished nickel	7	12	48.00
DDS-54	Type D, deck	All polished brass	7	12	48.00
<b>RDS-54</b>	Type D, rail	All black enamel	7	12	40.00
<b>RDS-54</b>	Type D, rail	Black body and stand with nickel trim	7	12	40.00
RDS-54	Type D, rail	Black body and stand with brass trim	7	12	40.00
RDS-54	Type D, rail	All polished nickel	7	12	48.00
RDS-54	Type D, rail	All polished brass	7	12	48.00
	DDS-54 DDS-54 DDS-54 DDS-54 DDS-54 RDS-54 RDS-54 RDS-54 RDS-54 RDS-54	DDS-54 Type D, deck RDS-54 Type D, rail RDS-54 Type D, rail RDS-54 Type D, rail RDS-54 Type D, rail	DDS-54 Type D, deck DDS-54 Type D, rail RDS-54 Type D, rail	Type Control Finish Diameter  DDS-54 Type D, deck All polished nickel 7  DDS-54 Type D, rail All black enamel 7  RDS-54 Type D, rail Black body and stand with nickel trim 7  RDS-54 Type D, rail Black body and stand with nickel trim 7  RDS-54 Type D, rail Black body and stand with nickel trim 7  RDS-54 Type D, rail Black body and stand with brass trim 7  RDS-54 Type D, rail Black body and stand with brass trim 7	Type         Control         Finish         Diameter Ins.         Height Ins.           DDS-54         Type D, deck         All black enamel         7         12           DDS-54         Type D, deck         Black body and stand with nickel trim         7         12           DDS-54         Type D, deck         Black body and stand with brass trim         7         12           DDS-54         Type D, deck         All polished nickel         7         12           DDS-54         Type D, deck         All polished brass         7         12           RDS-54         Type D, rail         All black enamel         7         12           RDS-54         Type D, rail         Black body and stand with nickel trim         7         12           RDS-54         Type D, rail         Black body and stand with brass trim         7         12           RDS-54         Type D, rail         All polished nickel         7         12           RDS-54         Type D, rail         All polished nickel         7         12           RDS-54         Type D, rail         All polished nickel         7         12

### TYPES SDS-96 AND SDS-128

These types are intended for mounting on the rail or bulkhead of craft in position suitable for direct hand ation. They are fitted with a socket (as illustrated) otherwise they are identical to Types DDS-96 and operation. DDS-128.

These types differ only in size, the Type SDS-96 being equipped with a 9 inch diameter reflector and the Type SDS-128 with a 12 inch reflector.

They are furnished in standard and special finishes as listed. Prices do not include lamps.

				maximum	rocar	List
List				Diameter	Height	Price
No	Тўре	Control	Finish	Ins.	Ins.	Each
19914	SDS- 96	Type D, socket	All black enamel	111/4	16 <del>13</del>	<b>\$66.00</b>
19915	SDS- 96	Type D, socket	Black body and stand with nickel trim	111/4	16 <del>11</del>	66.00
19916	SDS- 96	Type D, socket	Black body and stand with brass trim	111/4	16 <del>11</del>	66.00
19917	SDS- 96	Type D, socket	All polished nickel	$11\frac{1}{4}$	16 <del>11</del>	80.00
19918	SDS- 96	Type D, socket	All polished brass	111/4	16 <del>11</del>	<b>80.00</b>
19919	SDS-128	Type D, socket	All black enamel	141/2	2034	106.00
19920	SDS-128	Type D, socket	Black body and stand with nickel trim	$14\frac{1}{2}$	2034	106.00
19921	SDS-128	Type D, socket	Black body and stand with brass trim	$14\frac{1}{2}$	203/4	106.00
19922	SDS-128	Type D, socket	All polished nickel	$14\frac{1}{2}$	2034	128.00
19923	SDS-128	Type D, socket	All polished brass	141/2	2034	128.00
D <sub>2</sub>	livow F O	B Factory Phila	dalahia Da For warahaysa daliwariasen	rito nonros	d Xabrea	

For warehouse deliveries write nearest house. Delivery F. O. B. Factory, Philadelphia, Pa.

### GOLDEN GLOW MARINE SEARCHLIGHTS



Types DDS-95 and DDS-128 Type D Control



Types CPS-95 and CPS-128
Type P Control

### TYPES DDS-95 AND DDS-128

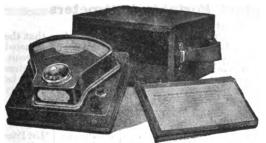
These types are designed for installation on the deck of craft where they can be operated directly by hand. They differ only in size, the Type DDS-95 being equipped with a 9 inch diameter reflector while the Type DDS-128 is equipped with a 12 inch reflector.

Pri	ces do not in	clude lamps.		Max.	Total	List
List		-		Diam.	Height	Price
No.	Type	Control	Finish	Ins.	Ins.	Each
19867	DDS- 95	Type D, deck	All black enamel	111/4	191/4	<b>\$</b> 75.00
19868	DDS- 95	Type D, deck	Black body and stand with nickel trim	111/4	1914	75.00
19869	DDS- 95	Type D, deck	Black body and stand with brass trim	111/4	191/4	<b>75.00</b>
19870	DDS- 95	Type D, deck	All polished nickel	111/4	1914	90.00
19871	DDS- 95	Type D, deck	All polished brass	111/4	1914	90.00
19872	DDS-128	Type D, deck	All black enamel	141/2	$23\frac{1}{8}$	120.00
19873	DDS-128	Type D, deck	Black body and stand with nickel trim	14 1/2	231/8	120.00
19874	DDS-128	Type D, deck	Black body and stand with brass trim	$14\frac{1}{2}$	$23\frac{1}{8}$	120.00
19875	DDS-128	Type D, deck	All polished nickel	141/2	231/8	144.00
19876	DDS-128	Type D, deck	All polished brass	141/2	231/8	144.00

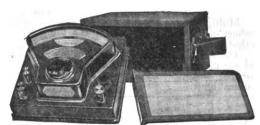
### TYPES CPS-95 AND CPS-128

Searchlights of this type are for installation on the cabin roof, being equipped with Type P control (described on preceding pages) which provides a means of directing the lamp from inside the cabin. Type CPS-95 is equipped with a 9 inch diameter reflector and differs only in size from the Type CPS-128 which is equipped with a 12 inch reflector.

	ices do not i	nclude lamps.		Max.	Total	List
List		_		Diam.	Height	Price
No.	Type	Control	Finish	Ins.	Ins.	Each
19877	CPS- 95	Type P. cabin	All black enamel	111/4	191/4	<b>\$</b> 93.76
19878	CPS- 95	Type P, cabin	Black body and stand with nickel trim	111/4	1914	93.76
19879	CPS- 95	Type P. cabin	Black body and stand with brass trim	111/4	191/4	93.76
19880	CPS- 95	Type P. cabin	All polished nickel	111/4	1914	112.50
19881	CPS- 95	Type P, cabin	All polished nickel	111/4	191/2	112.50
19882	CPS-128	Type P. cabin	All black enamel	141/2	$23\frac{1}{8}$	138.76
19883	CPS-128	Type P, cabin	Black body and stand with nickel trim	141/2	231/8	138.76
19884	CPS-128	Type P. cabin	Black body and stand with brass trim	$14\frac{1}{2}$	$23\frac{1}{8}$	138.76
19885	CPS-128	Type P. cabin	All polished nickel	141/2	$23\frac{1}{8}$	166.50
19886	CPS-128	Type P, cabin	All polished brass	141%	$-23\frac{1}{8}$	166.50
	L'annual D. O.			$\sim$	MULA	







Model 1 Ammeter

## Model 1 Standard Portable Voltmeters and Ammeters MODEL 1 DC VOLTMETER

For Direct Current

List No.	Mfr. No.	Range in Volts	No. of Scale Divisions	Value of Each Scale Division in Volts	Readable to	Attachments	*List Price Each
320000	,	150	150	,	1/10 of a Volt		<b>3</b> 110.00
	1 2			1 :			
320001	. Z	150	150	1 1	710	Contact Key	115.00
	1	∫ 150 \			710 (		
320003	31/2	\ 3 \	150	1 1/50	1500 " }	"	150.00
	1	1 1501		1 1	1/10 "	"	
320004	4	1 15	150	11/10	1/100 "	"	150.00
020002	1 -	300	100	$\left  \right  $ $\left  \right  $ $\left  \right  $ $\left  \right  $	1/5 " {	"	200.00
320005	41/2	150}	150		140 "}	"	155.00
				\ \ \bar{1}{2} \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		l "	
320006	D	300	150	Z	76	"	130.00
320007	5 6 7	450	150	3	½8		130.00
320008	7	600	120	5	1/2 "	"	130.00
	1	( 600 )	1	∫ 4	\frac{1}{1/8}	"	
320009	9	1 150 }	150	l fi	140 "	"	160.00
020000		750	1 .00	<b> </b> } 5	112 "	16	100.00
320010	91⁄2	150	150	{;	140 "		160.00
020010	9/2		130	1 5 2	710 "		100.00
000011		∫ 600 }		1 14	1/2 " }	1 "	100.00
320011	10	{ 300 }	150	\\ \begin{cases} \\ 4 \\ 2 \\ 5 \\ \end{cases}			160.00
320012	11	750	150	5	\begin{pmatrix} 1/2 & " \ 1/5 & " \ \\ 1/2 & " \end{pmatrix}	"	140.00
	1	· ·	·	I			]

Any of the above with reversing key, price, extra, \$5.00.

When reversing key is applied, contact key is omitted.

Prices for instruments with ranges other than those listed will be the same as for those of the next higher range.

### MODEL 1 DC AMMETER For Direct Current

These instruments are extremely compact and will be found very serviceable for rapid work. To provide sufficient carrying capacity for the self-contained shunts, it has been found necessary to make them in three sizes, the main difference being in the arrangement of the binding posts.

List No.	Mfr. No.	Range in Amperes	No. of Scale Divisions	Value of Each Scale Division in Amperes	Readable to	*List Price Each
320013	1	5	100	1/20	1/200 of an Ampere	\$130.00
320014	2	15	150	1/10	1/100 " "	130.00
320015	3	25	100		1/40 " "	130.00
320016	4	50	100	1/4 1/2	1/20 " "	130.00
320017	5	100	100	1	1/10 " "	140.00
<b>320</b> 018	6	150	150	1 1	1/10 " "	150.00
<b>3200</b> 19	7	200	100	2	1/5 " "	160.00
<b>32</b> 0020	8	250	125	2	1/5 " "	160.00
320021	9	300	150	2	1/5 " "	160.00
320022	10	400	80	5	1/2 " "	180.00
320023	11	500	100	5	1/2 " " "	180.00

<sup>\*</sup> Delivery F. O. B. Factory, Newark, N. J. For warehouse deliveries write mearest house.

## WESTON INSTRUMENTS Multipliers for Model 1 Standard Portable Voltmeters

For Direct Current

Multipliers are resistance boxes, the coils in which are highly insulated, and are adjusted so that the readings of the instrument may be multiplied by any desired constant. Multipliers are usually constructed so that the indications of the pointer, multiplied by 2, 5, 10, 20 or 50, will give the potential of the circuit. The multipliers listed below have been designed for use in connection with direct-current voltmeters

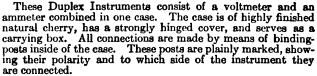
The multipliers listed below have been designed for use in connection with direct-current voltmeters and are generally used with 120 and 150-volt instruments. Intermediate ranges or subdivisions will be provided when ordered. By the use of the multipliers, the range of voltmeters may be increased to any practical limit.

List No.	Multiplying Constant of	Range in Volts of Voltmeter and Multiplier Combined	*List Price	List No.	Multiplying Constant of	Range in Volts of Voltmeter and Multiplier Combined	*List Price
320024	2 for 150 Volts	300	\$20.00	320035	30 for 150 Volts	4500	\$140.00
320025	4 for 150 Volts	600	30.00	320036	50 for 100 Volts	5000	160.00
<b>32</b> 0026	5 for 150 Volts	750	40.00	320037	40 for 150 Volts	6000	180.00
<b>32</b> 002 <b>7</b>	10 for 120 Volts	1200	<b>5</b> 0.00	320038	65 for 100 Volts	6500	200.00
<b>32</b> 0028	10 for 150 Volts	1500	60.00	320039	60 for 120 Volts	7200	210.00
<b>320</b> 029	20 for 100 Volts	2000	80.00	320040	50 for 150 Volts	7500	220.00
<b>3</b> 20030	15 for 150 Volts	2250	90.00	320041	60 for 150 Volts	9000	260.00
320031	25 for 100 Volts	2500	100.00	320042	100 for 100 Volts	10000	300.00
320032	20 for 150 Volts	3000	100.00	330043	100 for 120 Volts	12000	350.00
320033	25 for 150 Volts	3750	120.00	330044	100 for 150 Volts	15000	400.00
320034	40 for 100 Volts	4000	130.00			<u> </u>	

For subdivisions, add \$11.50 to above prices for each additional range.

Special prices will be quoted for multipliers for instruments of other ranges than above.

## Model 56 Portable Duplex Instruments Direct Current



These instruments are regularly supplied with a single-range voltmeter and a single-range ammeter; they will be supplied, however, with either 2 voltmeter movements or 2 ammeter movements of like or different ranges, if so desired. The voltmeter side may be obtained with a double range at a slight increase in cost. The ammeter is furnished only in single ranges up to 100 amperes with a self-contained shunt, but if multiple or higher ranges are desired they can be obtained by the use of external shunts.

These instruments will be found serviceable for all ordinary testing in which a greater degree of accuracy than 1 per cent. is not desired.





Model 56 Duplex

List	Range						
No.	Amperes	75	150	300	450	600	750
320045	5	\$103.50	\$109.25	\$115.00	\$120.75	\$126.50	\$138.00
320046	15	103.50	109.25	115.00	120.75	126.50	138.00
320047	25	103.50	109.25	115.00	120.75	126.50	138.00
320048	50	103.50	109.25	115.00	120.75	126.50	138.00
320049	100	103.50	109.25	115.00	120.75	126.50	138.00
320050	150	103.50	109.25	115.00	120.75	126.50	138.00
320051	200	110.40	116.15	121.90	127.65	133.40	144.90
320052	250	110.40	116.15	121.90	127.65	133.40	144.90
320053	300	110.98	116.73	122.48	128.23	133.98	145.48
320054	400	111.50	117.30	123.05	128.80	134.55	146.05
320055	500	112.70	119.60	125.35	131.10	136.85	148.35

-Upon application prices will be quoted for ranges or combinations of ranges not included in the above list.

If the voltmeter is desired with a double range, add \$6.90 to the list price for higher range. Specify voltage desired in ordering.

Delivery F. O. B. Factory, Newark, N. J. For warehouse deliveries write nearest house.



Model 1 Voltmeter

# Weston Standard Portable Voltmeters, Model 1, Inspectors' Style For Direct Current Classified as "Inspectors' Style," we furnish voltmeters securely fastened in highly polished mahogany cases. All of these instruments are provided with reversing keys.

The binding posts are of standard type, and ready access to them is provided by the design of the case.

List No.	Mfr. No.	. Description	List Price Each
<b>3200</b> 56	1	Complete with flexible cords	\$8.00
320057	2	Complete with flexible cords and compartment for same	10.00
<b>320</b> 058	3	Case contains compartment with set of 4 lamp adapters and flexible conducting	
	l	cords	20.00

Prices above are for cases only. To list prices of voltmeter shown elsewhere, add amounts given above.



Model 1 Millivoltmeter

### Weston Standard Portable Millivoltmeters, Model 1 For Direct Current

These instruments may be arranged for use with alloy shunts for ampere measurements at an additional cost of \$10,00.

Lis <b>t</b> No.	Mír. No.	Description	List Price Each
320059	1	Range, 0 to 20 millivolts, 100 divisions, each representing 0.2 of a millivolt, readable to 0.02 of a millivolt.	\$100.00
320060	2	Range, 10 to 0 to 10 millivolts, zero center, 100 divisions, each representing 0.2 of a millivolt, readable to 0.02 of a millivolt.	100.00
320061	3	Double Range, 10 to 0 to 10 and 100 to 0 to 100 millivolts, zero center, 100 divisions, supplied with contact key, by the use of which either range may be employed.	110.00
320062	4	Double Range, 0 to 20 and 0 to 200 millivolts, 3 binding posts, 100 divisions, each representing either 0.2 of a millivolt or 2 millivolts, according to range used.	110.00



### Weston Patent Alloy Shunts

### FOR USE WITH PORTABLE STANDARD MILLIVOLTMETER MODEL No. 1

### For Direct Current

These Millivoltmeters, in connection with Weston Patent Alloy Shunts, read directly in amperes. Shunts of different sizes can be adjusted to the same instrument, and it can, therefore, be used to measure a current of 2000 amperes with the same degree of accuracy as a current of 1 ampere. The combination of millivoltmeter and shunt is practically compensated for temperature and is correct within 1 of 1 per cent. If at any time the user of this combination desires to employ additional ranges to those for which the instrument is already adjusted, it is simply necessary to purchase additional shunts of the ranges required, thus saving the expense of an additional instrument. The scales of the instrument can be divided into 100, 120 or 150 divisions. In selecting shunts of different range for use in connection with one instrument, it should be considered that the higher ranges must be even multiples of the lower one in order to suit the same scale on the instrument.

These shunts can be supplied in two or more ranges combined in one case, as indicated in price list below.

### Shunts with Single Range

List	Range in	List Price	List	Range in	List Price	List	Range in	List Price
No.	Amperes	*Each	No	Amperes	*Each	No.	Amperes	*Each
320077	1	\$23.00	320085	75	\$57.50	320093	600	126.50
320078	3	28.75	320086	100	69.00	320094	750	138.00
320079	5	34.50	320087	150	74.75	320095	800	149.50
320080	10	34.50	320088	200	80.50	320096	1000	184.00
320081	15	34.50	320089	250	86.25	320097	1500	299.00
320082	25	40.25	320090	300	92.00	320098	2000	402.50
320083 320084	30 50	46.00 51.75	320091 320092	400 500	103.50 115.00			,

### Shunts With 2 Ranges Combined in One Case

320099	5 and 1	\$46.00   320107	100 and 10	\$92.00   320115	400 and 200	<b> \$149.50</b>
320100	10 and 1	51.75 320108		97.75   320116	500 and 50	143.75
320101	15 and 1.5	57.50   320109		103.50   320117	500 and 100	149.50
320102	15 and 3	57.50   320110		109.25   320118	500 and 200	149.50
320103	30 and 3	57.50   320111		120.75 320119	600 and 60	149.50
320104	40 and 4	63.25   320112		126.50   320120	600 and 300	184.00
320105	50 and 5	69.00   320113		138.00   320121	750 and 300	207.00
320106	75 and 15	80.50   320114	400 and 40	138.00   320122	1000 and 500	322.00

### Shunts With 3 or More Ranges Combined in One Case

320123	15-3-0.75	<b>  \$</b> 69.00	<b>32</b> 0131	75-15-1.5				\$149.50
320124	15-3-1.5	69.00	320132	100-10-1	103.50	320140	150-75-15-1.5-0.75	161.00
320125	30-15-1.5	80.50	320133	100-20-2	103.50	320141	200-20-2	126.50
320126	<b>3</b> 0-15-3	80.50	320134	100-50-20-2	138.00	320142	200-100-10	138.00
32012 <b>7</b>	30-15-7.5-1.5	109.25	320135	100-50-20-10-5-1	161.00	320143	300-15-1.5	138.00
320128	<b>5</b> 0-5-0.5	92.0∪	320136	150-15-1.5	115.00	320144	300-30-3	138.00
320129	<b>50</b> -10-1	92.00	320137	150-15-1.515	138.00	320145	300-75-15	149.50
320130	<b>5</b> 0-20-5-0.5	126.50	320138	150-75-15	126.50			

Above prices include adjustment between millivoltmeter and shunts.

\*Delivery F. O. B. Factory, Newark, N. J. For warehouse deliveries write nearest house.

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Model 45 Voltmeter

## Voltmeters and Ammeters Model 45 Portable

### For Direct Current

These instruments are designed to meet the demand for a low-priced voltmeter or ammeter of sufficient accuracy for station work and general testing. The movement in this type of instrument is completely enclosed in an iron case (which protects it in a large measure from stray magnetic fields), securely fastened in a wooden carrying box. This box is provided with a hinged cover which protects the scale and binding-posts. Ammeters, having a maximum range of 25 amperes or less, are provided with self-contained shunts. Higher ranges are adjusted to external station type shunts.

### **MODEL 45 DC VOLTMETERS**

List No.	Range in Volts	Value of Each Scale Division in Volts	*List Price Each
320146 ·	0 to 3	0.02	\$57.50
320147	0 " 5	0.05	<b>57</b> . <b>50</b>
320148	0 " 15	0.1	<b>57</b> . <b>50</b>
320149	0 " 150	1 1	67.85
320150	0 " 300	2	74.75
320151	0 " 600	1 5 1	<b>80.50</b>
320152	0 " 750	1 5	85.10

Double-scale voltmeters in this type will be furnished, when desired, at the price of \$5.75 additional to the list price of the highest range for each step.

### **MODEL 45 DC AMMETERS**

For all ranges above 25 amperes these instruments consist of millivoltmeters adjusted with external station type shunts to read direct in amperes.

List No.	Range in Amperes	Value of Each Scale Division in Amperes	*List Price Each
323022	0 to 1.5	0.01	\$57.50
320153	0 " 5	0.05	57.50
320154	0 " 15	0.1	<b>57</b> . <b>50</b>
320155	0 " 25	0.2	57.50
320156	0 " 50	0.5	<b>5</b> 8.65
320157	0 " 100	1	60.95
320158	0 " 150	1 1	62.10
320159	0 " 200	2	64.40
320160	0 " 250	2	64.98
320161	0 " 300	2	64.98
320162	0 " 400	5	65 55
320163	0 " 500	5	67.85
323023	0 " 600	4	70.15
323024	0 " 750	5	<b>72</b> . <b>45</b>

### Western Electric

### WESTON INSTRUMENTS



Model 1 Mil-Ammeter

### Weston Standard Portable Direct-Reading Mil-Ammeters, Model 1

For	Direc	t Cui	rre	nt
No.	of	Value	of	each

List No.	Range in Milliamperes	No. of Scale Divisions	Value of each Scale Division in Milliamperes	Readable to	*List Price Each
0	150 300 600 1000 1500	150 150 150 100 150	1 2 4 10 10	alo of a Milliampere d of a Milliampere d of a Milliampere d of a Milliampere 1 Milliampere 1 Milliampere	\$100.00 100.00 100.00 100.00 110.00
5 6	{ 500 50 500 10	100	$\begin{bmatrix} 5 \\ 1/2 \\ 5 \\ 1 \end{bmatrix}$	½0 of a Milliampere	120.00 120.00
7	Same range and resistance be nected in se the lower sea tion being se	ox or multiplicates with the cale may be received with 1	ier, having 2 content bits ad directly in 0 or 100 volts,	is supplied with a small bils. When this is con- inding-posts marked 10, volts, a full scale deflec- according to the coil of	150.00

### Weston Single Phase Portable A.C. and D.C. Wattmeter



Model 310

### MODEL 310

These instruments represent the latest development in electro-dynamometer wattmeters and embody many characteristics hitherto considered unattainable in instruments of this class.

They are contained in highly polished mahogany boxes, provided with carrying handles, locks and covers equipped with slip hinges. The weight is approximately 11 lbs. and the dimensions are  $8 \times 10\frac{1}{4} \times 5\frac{3}{4}$  inches over all.

The scales are 51/4 inches long, are uniform throughout their entire length, and are provided with mirrors to prevent parallax errors.

The pointers are of the Weston triangular truss type, with knife edges, and are equipped with simple zero setting devices controlled from the outside of the case.

### RANGES

Double ranges for both the current and voltage circuits

are provided.

The double current range feature is obtained by connecting the two field coil sections either in series or in multiple by means of links and binding screws, conveniently located on the top of the instrument. These links are provided with handles to facilitate their manipulation and are slotted, making it unnecessary to remove them entirely each time the range is changed.

The double voltage ranges are controlled by means of

independent binding posts.

As each instrument has a number of ranges, a scale cannot be made which is readable with equal facility for all ranges. In each case, however, a scale is provided which gives 1, 2 or 5 units per division for the range marked and simple multiplying factors for the other ranges. See following page for prices.

Delivery F. O. B. Factory, Newark, N. J. For warehouse deliveries write nearest house.

### Weston Single Phase Portable A.C. and D.C. Wattmeters CONTINUED

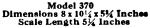
Price List of Model 310 Single Phase Wattmeter—(See Preceding Page)

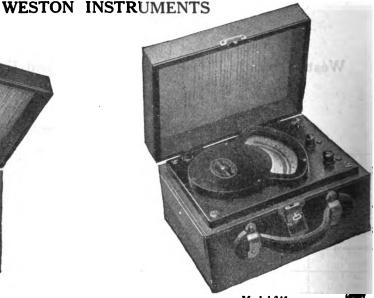
		Amp	ere		*Watt	Ranges	Number	
Volta	No	rmal	Max	imum	Field Coils	Field Coils	of Scale	List
	Series	Multiple	Series	Multiple	in Series	in Multiple	Lines	Price
Normal 100/50 Maxmium 150/75	1 2.5 5 10 20 30 50	2 5 10 20 40 60 100	2 5 10 20 40 60 75	4 10 20 40 80 120	100/50 250/125 500/250 1/ .5 K.W. 2/1 K.W. 3/1.5 K.W 5/2.5 K.W.	200/100 560/250 1000/500 2/1 K.W. 4/2 K.W. 6/3 K.W. 10/5 K.W.	100 125 100 100 100 150	\$161.00 161.00 161.00 161.00 172.50 172.50 172.50
Normal 150/75 Maximum 250/125	1 2.5 5 10 20 30 50	2 5 10 20 40 60 100	2 5 10 20 40 60 75	4 10 20 40 80 120 150	150/75 375/187.5 750/375 1.5/ .75 K.W. 3/1.5 K.W. 5/2.5 K.W. 7.5/3.75 K.W.	300/150 750/375 1500/750 3/1.5 K.W. 6/3 K.W. 10/5 K.W. 15/7.5 K.W.	150 150 150 150 150 100 150	161.00 161.00 161.00 161.00 172.50 172.50 172.50
Normal 200/100 Maximum 300/150	1 2.5 5 10 20 30 50	2 5 10 20 40 60 100	2 5 10 20 40 60 75	4 10 20 40 80 120 150	200/100 500/250 1/ .5 K.W. 2/1 K.W. 4/2 K.W. 6/3 K.W. 10/5 K.W.	400/200 1000/500 2/1 K.W. 4/2 K.W. 8/4 K.W 12/6 K.W 20/10 K.W.	100 100 100 100 100 120 100	172.50 172.50 172.50 172.50 184.00 184.00 184.00
Normal 300/150 Maximum 450/250	1 2.5 5 10 20 30 50	2 5 10 20 40 60 100	2 5 10 20 40 60 75	4 10 20 40 80 120 150	300/150 750/375 1.5/.75 K.W. 3/1.5 K.W. 6/3 K.W. 10/5 K.W. 15/7.5 K.W.	600/300 1500/750 3/1.5 K.W. 6/3 K.W. 12/6 K.W. 20/10 K.W. 30/15 K.W.	150 150 150 150 150 120 100	172.50 172.50 172.50 172.50 184.00 184.00 184.00
Normal 500/100 Maximum 600/150	1 2.5 5 10 20 30 50	2 5 10 20 40 60 100	2 5 10 20 40 60 75	4 10 20 40 80 120 150	500/100 1250/250 2500/500 5/1 K W. 10/2 K.W. 15/3 K.W. 25/5 K.W.	1000/200 2500/500 5000/1000 10/2 K.W. 20/4 K.W. 30/6 K.W. 50/10 K.W.	100 125 100 100 100 150 100	195.50 195.50 195.50 195.50 207.00 207.00 207.00
Normal 600/150 Maximum 675/250	1 2.5 5 10 20 30 50	2 5 10 20 40 60 100	2 5 10 20 40 60 75	10 20 40 80 120 150	600/150 1500/375 3/ 75 K.W. 6/1.5 K.W. 12/3 K.W. 20/5 K.W. 30/7.5 K.W.	1200/300 3000/750 6/1.5 K.W. 12/3 K.W. 24/6 K.W. 40/10 K.W. 60/15 K.W.	150 150 150 150 150 120 100 150	201 .25 201 .25 201 .25 201 .25 201 .25 212 .75 212 .75 212 .75
Normal 600/300 Maximum 675/450	1 2.5 5 10 20 30 50	2 5 10 20 40 60 100	2 5 10 20 40 60 75	4 10 20 40 80 120 150	600/300 1.5/.75 K.W. 3/1.5 K.W. 6/3 K.W. 12/6 K.W. 20/10 K.W. 30/15 K.W.	1200/600 3/1.5 K.W. 6/3 K.W. 12/6 K.W. 24/12 K.W. 40/20 K.W. 60/30 K.W.	120 150 150 120 120 120 100	201 . 25 201 . 25 201 . 25 201 . 25 201 . 25 212 . 75 212 . 75 212 . 75
Normal 750/150 Maximum 750/250	1 2.5 5 10 20 30 50	2 5 10 20 40 60 100	2 5 10 20 40 60 75	4 10 20 40 80 120 150	750/150 1875/375 3750/750 7.5/1.5 K.W. 15/3 K.W. 25/5 K.W. 37.5/7.5 K.W.	1500/300 3750/750 7500/1500 15/3 K.W. 30/6 K.W. 50/10 K.W. 75/15 K.W.	150 150 150 150 150 100 150	207.00 207.00 207.00 207.00 218.50 218.50 218.50
Normal 750/300 Maximum 750/450	1 2.5 5 10 20 30 50	2 5 10 20 40 60 100	2 5 10 20 40 60 75	4 10 20 40 80 120 150	750/300 2000/800 3750/1500 7.5/3 K.W. 15/6 K.W. 25/10 K.W. 37.5/15 K.W.	1500/600 4000/1600 7500/3000 15/6 K.W. 30/12 K.W. 50/20 K.W. 75/30 K.W.	150 160 150 150 150 100 150	207.00 207.00 207.00 207.00 218.50 218.50 218.50

<sup>\*</sup>Ranges not marked K.W. read in watts.

Delivery F. O. B. Factory, Newark, N. J. For warehouse deliveries write nearest house







Model 341 Dimensions 8 x 10½ x 5¾ Inches Scale Length 5¼ Inches

## Weston Portable A.C. and D.C. Ammeter MODEL 370

These instruments are electro-dynamometer ammeters and may be used with equal accuracy on either direct current circuits or on alternating current circuits of any frequency up to 133 cycles per second and of any wave form.

They are contained in polished mahogany boxes, provided with carrying handles, locks and covers equipped with slip hinges. The weight is approximately 11 lbs. and the dimensions are  $8 \times 10\frac{1}{4} \times 5\frac{3}{4}$  inches over all.

They will be found particularly useful as transfer instruments from direct to alternating current and for checking electro-magnetic (movable iron) or induction type instruments, or for all measurements of current where very high accuracy is desired.

PRICE LIST OF MODEL 370—MILLIAMMETERS

PRICE LIST OF MODEL 370—MILLIAMMETERS										
Single Range,	Approximate	List Price	Single Range,	Approximate	List Price					
Milliamperes	Res. in Ohms	Each	Milliamperes	Res. in Ohms	Each					
15	1400	<b>\$155.25</b>	150	19.5	<b>\$</b> 155.25					
20	720	155.25	200	7.5	155.25					
30	350	155.25	300	3.2	155.25					
50	167	155.25	500	1.2	155.25					
75	50	155.25	750	0.9	155.25					
100	26.5	155.25	l .							
AMMETERS										
Double Range, Amperes 2-1	List Price Each \$172.50	Double Range, Amperes 5-2½	List Price Each \$172.50	Double Range, Amperea 10-5	List Price Each \$172.50					

### Weston A.C. and D.C. Portable Voltmeter MODEL 341

These instruments are electro-dynamometer voltmeters and may be used with equal accuracy on either alternating current or direct current circuits.

They are contained in highly polished mahogany boxes, provided with carrying handles, locks and covers equipped with slip hinges.

The weight is approximately 11 lbs., and the dimensions are 8 x 10 1/4 x 5 3/4 inches over all.

PRICE LIST, MODEL 341 VOLTMETERS

SINGLE RANCES

		SINGLE	RANGES	•	
Ranges,	Approximate	List Price	Ranges,	Approximate	List Price
Volta	Res. in Ohms	Each	Volts	Res. in Ohms	Each
1	2	\$149.50	15	100	\$143.75
1.5	3	149.50	30	470	138.00
2	4	149.50	75	1180	138.00
3	ē.	149.50	120	2700	138.00
5	18	149.50	150	3300	138.00
7.5	50	143.75	300	6700	143.75
10	66	143.75	600	20000	155.25
12	80	143.75	750	25000	161.00
	•	DOUBLE			
5-1	10-2	161.00 I	1 150-75	3300-1650	\$149.50
15-1.5	30-3	161.00	300-150	6700-3350	155.25
3-1.5	6-3	161.00	600-150	20000-5000	166.75
6-3	21-10.5	161.00	600-300	20000-1000 <b>0</b>	166.75
15-7.5	100-50	155.25	750-150	25000-5000	172.50
30-15	300-150	155.25	750-300	25000-10000 ·	172.50
120-60	2700-1350	149.50		Distribution (2000)	2.2.00

Delivery F. O. B. Factory, Newark, N. J. For warehouse deliveries write nearest house.

i E

### Special Model 310 Wattmeters for Very Low Power Factors

For measurements in circuits where the power factor is very low, such as core losses in transformers, a special line of Weston Wattmeters has been designed, giving full scale deflection for 20% power factor; that is, the scale value in watts is 20% of the number of volt amperes applied.



Model 329

Maximum Volts	Maximum Capacity in Amperes		Watt I	Ranges	Number of Scale	List Price
, 52	Fields in Series	Fields in Multiple	Fields in Series	Fields in Multiple	Lines	
150/75 150/75 150/75	0.5 1 2.5	1 2 5	15/7.5 30/15 75/37.5	30/15 60/30 150/75	150 150 150	\$184.00 184.00 184.00
150/75 150/75 150/75	5 10 20	10 20 40	150/75 300/150 600/300	300/150 600/300 1200/600	150 150 120	184.00 195.50 195.50
150/75	50	100	1500/750	3000/1500	150	195.50

\*These ranges are not compensated and are useful for special conditions only. Correspond before ordering.

### Weston Portable Polyphase Wattmeter MODEL 329

These instruments are contained in highly polished mahogany boxes, provided with carrying handles, locks and covers equipped with slip hinges. The weight is approximately 17½ lbs. Dimensions are 9½ x 10½ x 8½ inches over all.

This form of instrument really consists of two single phase

wattmeters, electrically independent, but having their movable coils mounted on a common shaft, so that they rotate together. Each coil, however, moves in its own system of field coils. **SCALES** 

The scales are uniform throughout their entire length, and are  $5\frac{1}{4}$  inches long.

The pointers are equipped with simple zero setting devices and are of the Weston triangular truss type with knife edges. To prevent parallax errors mirrors are provided.

	Li	st Price	s of M	odel 329	Polyphase Wa	ttmeters		
All Table	Amperes				*Watt	Number of Scale Lines	Alle Ser	
Volta	Normal Maximum		Field Coils	Field Coils	List Price			
THE BEST TO	Series	Multiple	Series	Multiple	Series	Multiple	Lines	Trice
Normal 100/50 Maximum 150/75	1 2.5 5 10	2 5 10 20	2 5 10 20	4 10 20 40	200/100 500/250 1/.5 K.W. 2/1 K.W.	400/200 1000/500 2/1 K.W. 4/2 K.W.	100 100 100 100	\$253.00 253.00 253.00 264.50
Normal 150/75 Maximum 250/125	1 2.5 5 10	2 5 10 20	2 5 10 20	4 10 20 40	300/150 750/375 1.5/.75 K.W. 3/1.5 K.W.	600/300 1500/750 3/1.5 K.W. 6/3 K.W.	150 150 150 150	264.50 264.50 264.50 264.50
Normal 200/100 Maximum 300/150	1 2.5 5 10	2 5 10 20	2 5 10 20	4 10 20 40	400/200 1/ .5 K.W. 2/1 K.W. 4/2 K.W.	800/400 2/1 K.W. 4/2 K.W. 8/4 K.W.	100 100 100 100	264.50 264.50 264.50 276.00
Normal 300/150 Maximum 450/250	1 2.5 5 10	2 5 10 20	2 5 10 20	4 10 20 40	600/300 1,5/.75 K.W. 3/1.5 K.W. 6/3 K.W.	1200/600 3/1.5 K.W. 6/3 K.W. 12/6 K.W.	120 150 150 120	264.50 264.50 264.50 276 00
Normal 500/100 Maximum 600/150	1 2.5 5 10	2 5 10 20	2 5 10 20	4 10 20 40	1000/200 2500/500 5/1 K.W. 10/2 K.W.	2000/400 5000/1000 10/2 K.W. 20/4 K.W.	100 100 100 100	287.50 287.50 287.50 287.50 299.00
Normal 600/150 Maximum 675/250	1 2.5 5 10	2 5 10 20	2 5 10 20 •	10 20 40	1200/300 3/.75 K.W. 6/1.5 K.W. 12/3 K.W.	2400/600 6/1.5 K.W. 12/3 K.W. 24/6 K.W.	120 150 150 120	293.25 293.25 293.25 304.75
Normal 600/300 Maximum 675/450	1 2.5 5 10	2 5 10 20	2 5 10 20	10 20 40	1.2/.6 K.W. 3/1.5 K.W. 6/3 K.W. 12/6 K.W.	2.4/1.2 K.W. 6/3 K.W. 12/6 K.W. 24/12 K.W.	120 150 120 120	293.25 293.25 293.25 304.75
Normal 750/150 Maximum 750/250	1 2.5 5 10	2 5 10 20	2 5 10 20	4 10 20 40	1500/300 3750/750 7.5/1.5 K.W. 15/3 K.W.	3000/600 7500/1500 15/3 K.W. 30/6 K.W.	150 150 150 150	299.00 299.00 299.00 310.50
Normal 750/300 Maximum 750/450	1 2.5 5	2 5 10 20	2 5 10 20	10 20 40	1500/600 3750/1500 7.5/3 K.W. 15/6 K.W.	3000/1200 7500/3000 15/6 K.W. 30/12 K.W.	150 150 150 150	299.00 299.00 299.00 310.50

Ranges not marked K.W. read in watts.

Delivery F. O. B. Factory, Newark, N. J. For warehouse deliveries write nearest house. Dy







Model 155 Ammeter

### Voltmeters and Ammeters Model 155 Portable

### For Alternating Current

These instruments are of the Weston electromagnetic type, in which all the disadvantages and errors of the soft-iron type, previously supposed to be inherent, have been either eliminated or so far reduced as to be practically negligible. The indications of these Weston instruments are accurate within ½ per cent., independent of changes in temperature, frequency or wave form throughout the range of commercial practice. The scales are open and fairly uniform throughout about \$\frac{1}{2}\$ of the total range of deflection; therefore, the accuracy of reading within the working range is greater than it would be with a uniform scale. The indications are also dead beat and will instantly and accurately follow every change in the value of the quantity being measured.

### MODEL 155 AC-PORTABLE VOLTMETERS

Range	*List Price	Range	*List Price
in Volts	Each	in Volts	Each
75	\$42.55 42.55 43.13 51.75	500	\$60.95 63.25 69.00

### **MODEL 155 AC-PORTABLE AMMETERS**

Range	*List Price	Range	*List Price
in Amperes	Each	in Amperes	Each
1 2 3 5 10 15 15 15 15 15 15 15 15 15 15 15 15 15	\$40.83	75.	\$40.25
	40.25	100.	40.25
	39.10	150.	41.40
	39.10	200.	42.55
	39.10	250.	43.13
	39.10	300.	43.70
	39.10	400.	48.30
	40.25	500.	52.90

### MODEL 155 AC—PORTABLE MIL-AMMETERS

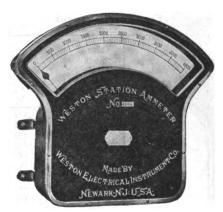
Mil-Amperes	*List Price Each	Mil-Amperes',	*List Price Each
75. 150. 250.	\$40.83 40.83 40.83	750	\$40.83 40.83

### Leather Carrying Cases

### For Model No. 155 Instruments

All ammeters, mil-ammeters and also voltmeters, up to and including 300 volts, can be provided with leather cases at additional price of \$9.78. Voltmeters with a range above 300 volts, and not greater than 750 volts, can be provided with leather carrying cases at additional cost of \$12.08. Prices on application \*Delivery F. O. B. Factory, Newark, N. J. For warehouse deliveries write nearest house.

### WESTON SWITCHBOARD INSTRUMENTS



Model 11 Ammeter

## Weston Illuminated Dial Station Ammeters, Model 11 With Shunts

### For Direct Current

The cases for these meters are supplied in two patterns. The one is intended to be attached by means of two brackets directly to and projecting from the front of the switchboard. The other, known as "flush type," is designed to be countersunk so that the front of the instrument is practically flush with the face of the board.

The cases are regularly finished in the following styles, but other finishes will be supplied on special

order. Standard finish, dead-black japan.

No. 2 finish.—Border of case and face of letters nickel-plated and polished; background of letters and back case dead-black japan. This is a neat and durable finish and one we highly recommend for general use.

No. 3 finish.—Border of front and face of letters nickel-plated and polished; background of letters dead nickel matte; all parts of back case in sight nickel-plated and polished.

Each instrument has one pair of binding-posts to which the shunt leads are to be connected, and another pair for connecting the lamp.

Range in Am- peres	Value of Each Scale Division in Amperes	*List Price of Instru- ment with Shunt	Range in Am- peres	Value of Each Scale Division in Amperes	*List Price of Instru- ment with Shunt	Range in Am- peres	Value of Each Scale Division in Amperes	*List Price of Instru- ment with Shunt
200	2	\$159.00	1000	10	\$168.00	4000	50	<b>\$213.0</b> 0
250	5	159. <b>0</b> 0	1200	20	170.00	4500	50	228.00
300	5	159.50	1500	20	181.50	5000	50	<b>243</b> .00
400 ·	5	160.00	2000	20	190.50	6000	100	<b>258</b> .00
500	5	162.00	2500	50	193.50	7000	100	273.00
600	· 10	164.00	3000	50	198.00	8000	100	303.00
750	10	166.00	3500	50	204.00	10000	100	333.00

### Shunts for All Types of Switchboard Ammeters

Rating in Amperes	*List Price Shunts Alone	Rating in Amperes	*List Price Shunts Alone	Rating in Amperes	*List Price Shunts Alone
200	\$6.00	1000	\$16.50	4000 •	\$66.00
250	6.00	1200	18.70	4500	82.50
300	6.50	1500	31.20	5000	99.00
400	7.00	2000	41.46	6000	115.50
500	9.00	2500	44.56	7000	132.00
600	11.00	3000 ·	49.50	8000	165.00
750	13.00	3500	56.10	10000	198.00

<sup>\*</sup> Delivery F. O. B. Factory, Newark, N. J. For warehouse deliveries write nearest house.

### WESTON SWITCHBOARD INSTRUMENTS

### Weston Illuminated Dial Station Voltmeters, Model 11

For Direct Current



Range in Volts	Value of Each Scale Division in Volts	*List Price Each	Range in Volts	Value of Each Scale Division in Volts	*List Price Each
130	$\frac{}{2}$	\$150.00	3250	50	\$280.00
150	2	152.00	3500	50	300.00
180	2	154.00	4000	50	320.00
250	5	156.00	4500	50	340.00
300	5	158.00	5000	50	360.00
600	10	160.00	6000	100	390.00
750	10	162.00	6500	100	410.00
1000	10	200.00	7000	100	420.00
1500	20	220.00	7500	100	440.00
2000	20	240.00	8000	100	460.00
2500	50	260.00	9000	100	500.00
3000	50	270.00	10000	100	550.00

[Model 11 Voltmeter

These prices are for No. 2 finish, dead-black japan. For No. 3 finish, all nickel-plated, add \$9 These instruments will be supplied for mounting with the fronts flush with the switchboard (designated flush type) when so ordered, at the same prices.

### Weston Illuminated Dial Station Model 9 Ammeters (With Shunts)

### For Direct Current

These instruments are similar in appearance and are in every respect equal to the Model 11, as regards construction and accuracy. They are, however, of smaller dimensions, and are designed for use in plants where an illuminated-dial instrument is desired, but space is limited.

The cases for these instruments are supplied in two patterns. The one is intended to be attached directly to and projecting from the front of the switchboard. The other, known as the "flush type," is designed to be countersunk so that the front of the instrument is practically flush with the face of the board.

They are regularly supplied in No. 11 dead black Japan, but No. 2 and No. 3 finish, as described

under Model 11, may be had at a slight addition in cost.



Model 9 Ammeter

Range in Amperes	Value of Each Scale Division in Amperes	*List Price Each	Range in Amperes	Value of Each Scale Division in Amperes	*List Price Each
200	5	\$119.00	750	10	\$126.00
250	5	119.00	1000	20	128.00
300	5	119.50	1200	20	130.00
400	5	120.00	1500	20	141.50
500	10	122.00	2000	50	150.50
600	10	124.00	2500	50	153.50

Flush type will be furnished at same price if specially ordered. These prices are for No. 11 finish (dead-black japan). For No. 3 finish (all nickel-plated), add \$5.

### Weston Illuminated Dial Station Model 9 Voltmeters

For Direct Current

Range in Volts	Value of Each Scale Division in Volts	*List Price Each	Range in Volts	Value of Each Scale Division in Volts	*List Price Each
0 to 100	2 2	\$112.00	0 to 250	5	\$128.00
0 to 150		124.00	0 to 300	5	132.00

Flush type will be furnished at same price if specially ordered.

These prices are for No. 11 finish (dead-black japan).

For No. 3 finish (all nickel-plated), add \$5.
\*Delivery F. O. B. Factory, Newark, N. J. For warehouse deliveries write nearest house.



Mode 57 Ammeter Range, 750 Amperes



Model 57 Voltmeter Range, 125 Amperes

### Model 57 Round Pattern Station Ammeters and Voltmeters

### For Direct Current

These instruments are made in three patterns. Regular, for front of board connection. Back connection, in which the binding-posts are carried through to the rear of the switchboard. Flush type, in which a flange is provided for the front, allowing the entire body of the instrument to pass through for connection in the rear of the switchboard.

### MODEL 57 DC AMMETERS

Range in Amperes	Value of Each Scale Division in Amperes	*List Price Each	Range in Amperes	Value of Each Scale Division in Amperes	*List Price Each
1	0.01	\$50.00	300	5	\$56.50
_5	0.1	50.00	400	10	<b>57</b> .00
10	0.1	<b>5</b> 0 . <b>00</b>	500	10	59.00
15	0.2	<b>5</b> 0.00	600	10	61.00
25	0.5	<b>5</b> 0.0 <b>0</b>	750	10	63.00
50	1 1	51.00	1000	10	65.00
75	1	52.00	1200	20	67.00
100	l ī	53.00	1500	20	78.50
150	1 2 1	54.00	2000	20	87.50
200	1 2	<b>5</b> 6.0 <b>0</b>	2500	50	90.50
250	5	56.50	2000	1 20 1	30.00

The lower ranges up to 75 amperes are self-contained, the shunts being an integral part of the instrument. For ranges above 75 amperes the shunt is detachable and substantially the same as that for the illuminated-dial instruments, excepting that when specially ordered these instruments will be furnished self-contained for ranges up to 200 amperes.

### MODEL 57 DC VOLTMETERS

Range in Volts	Value of Each Scale Division Volts	*List Price Each	Range in Volts	Value of Each Scale Division Volts	*List Price Each
3. 6. 15. 25. 50. 75.	0.02 0.05 0.1 0.2 0.5 0.5	\$50.00 50.00 50.00 52.00 53.00 54.50	125	1 1 2 2 5 5	\$56.50 59.00 63.00 65.00 70.00 74.00

These prices are for No. 2 finish (dead-black japan). For No. 3 finish (all nickel-plated), add \$4. Any of the instruments in the above list will be furnished with back connections or flush-type cases when specified in order.

<sup>\*</sup>Delivery F. O. B. Factory, Newark, N. J. For warehouse deliveries write nearest house.







Model 24 Voltmeter

### Weston Round Pattern Model 24 Station Instruments

### For Direct Current

These instruments are made in three types to conform with the Model 57 instruments, i. e., regular, back connection and flush type. Are supplied in No. 11 standard black japan finish, but special finishes may be obtained at a slight advance in cost.

### **MODEL 24 SELF-CONTAINED AMMETERS**

Range in Amperes	Value of Each Scale Division in Amperes	*List Price Each
0 to 1	0.02	\$30.00
0 to 5	0.1	<b>30</b> .00
0 to 10	0.2	<b>3</b> 0. <b>00</b>
0 to 15	0.2	31.00
0 to 25	0.5	31.00
0 to 50	1	31.50
0 to 80	2	31.50
0 to 100	. 2	32.00
0 to 130	2	33.00
0 to 150	2	33.00
0 to 200	4	34.00

These ammeters are regularly furnished with internal shunts up to and including 200 amperes. will, however, be furnished with detached shunts when specified in order.

These prices are for No. 11 finish (dead-black japan). For No. 3 finish (all nickel-plated), add \$3. Any of the instruments in the above list will be furnished with back connections or flush-type cases when specified in order.

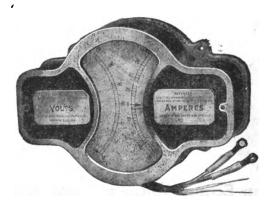
### **MODEL 24 VOLTMETERS**

Range in Volts	Value of Each Scale Division in Volts	*List Price Each
0 to 3 0 to 5 0 to 6 0 to 10 0 to 15 0 to 25 0 to 50	0.05 0.1 0.1 0.2 0.2 0.5	\$31.00 31.00 31.50 32.00 32.00 32.00 32.00
0 to 80 0 to 130 0 to 150 0 to 250 0 to 300 0 to 600	2 2 2 5 5 8	32.00 33.00 34.00 39.00 41.00 53.00

For No. 3 finish (all nickel-plated), add 33. These prices are for No. 2 finish (dead-black japan). Any of the instruments in the above list will be furnished with back connections or flush-type cases when specified in order.

### Western Electric

### WESTON INSTRUMENTS



Models 38 and 39 Duplex Instruments (Direct Current)
Showing a Model 39 Instrument

### Weston Duplex Instruments, Model 38 and Model 39

#### For Direct Current

These instruments are called "duplex" because they consist of a voltmeter and an ammeter combined in one case.

#### MODEL 39

This model has a well designed and carefully finished aluminum case, which closely surrounds the operative parts. The use of an aluminum case secures minimum weight as well as a much smaller size than is possible with Model 38, and as the case is practically waterproof, this model is well adapted for use where accidental exposure to the weather or to dampness would be likely to occur.

This instrument was originally designed for automobile service, and extreme care has been taken in its construction to enable it to stand without injury the constant vibration to which such instruments are subjected when used on vehicles.

The zero mark on the ammeter scale may be located at any point.

Price of ammeters with scales having zero in center of scale, or in any other part of scale, will be the same as for ammeters of regular constructions of same type with a range equal to the higher reading on the special scale.

The dimensions and weight of this model are as follows:

Length9	$\frac{1}{2}$ inches.	Height (or Depth)	$2\frac{1}{4}$ inches.
Width7	inches.	Weight (without Shunt)	8 lbs.

### MODEL 38

The interior parts of this model are similar to those used in Model 39, but the scale and pointer are larger. The case is made of cast iron, is not waterproof and does not closely surround the working parts of the instrument. The difference in the size of the case and the material of which it is made necessarily makes the 38 model much heavier than the 39. The dimensions and weight of the 38 model are as follows:

Length	11 inches.	Height (or Depth)	$3\frac{7}{8}$ inches.
Width	$\dots$ 8½ inches.	Weight (without Shunt)1	7 lb.

The Model 38 is well adapted for use where the existence of powerful magnetic fields would render it impossible to use the 39 model. The function of the cast-iron case is to shield the instrument from external fields, and this it does in a most effective manner. In both forms of instruments the workmanship is of the highest grade

### Price List of Models 38 and 39 Instruments

Range for	75 Volts	150 Volts	300 Volts	600 Volts
Ampere Scale	*List	*List	*List	*List
in Amperes	Price	Price	Price	Price
10	\$80.50	\$80.50	\$96.03	\$101.20
25	80.50	80.50	96.03	101.20
50	80.50	80.50	97.18	102.35
100	80.50	80.50	98:90	104.08
150	80.50	80.50	100.05	105.23
200	91.43	96.03	102.35	107.53
300	92.00	96.60	102.98	108.11
400	<b>92</b> .58	97.18	103:.50	108.69
500	94.30	98.90	105.23	110.40

Delivery F. O. B. Factory, Newark, N. J. For warehouse deliveries write nearest house.

### Western Electric

### **WESTON INSTRUMENTS**



Model 159

### Weston Eclipse Voltmeters and Ammeters

### For Direct Current

These instruments were given the designation "Eclipse" to distinguish them from the well-known moving coil Weston instruments. The designation is also very appropriate as these new instruments represent a distinct advance in the art of instrument design. They belong to the "soft-iron" or "electromagnetic" type, and yet they have none of the many disadvantages and errors commonly associated with instruments of this class. They possess a degree of accuracy and general electrical excellence hitherto wholly unknown, and heretofore deemed impossible of attainment with this type of instrument, and a degree of excellence in mechanical design and construction previously unapproached. The indications are substantially unaffected by temperature changes, whether due to changes in the room temperature or to the heating effect of the current through the instrument. Furthermore, the hysteresis or lag error is entirely negligible at the working part of the scale. This last attainment is unprecedented. Eclipse instruments are made in two models, namely: Model 160 and 159, the only difference being in the dimensions.

Model	Diameter, Inches	Depth, Inches	Length of Scale, Inches
160	9.56	3.15	6.5
159	7.25	3.15	5.25

### **ECLIPSE MODEL 159 AMMETERS**

Note: This model does not indicate polarity.

Range in Amperes	List Price	Range in Amperes	List Price
1	\$27.60	75	\$28.75
2	27.60	100	
3	27.03	150	29.90
5	26,45	200	31.05
10	26.45	250	32.67
15	26.45	300	
25	26.45	400	35.00
50	28.75	500	12.12.

### **ECLIPSE MODEL 159 VOLTMETERS**

Note: This model does not indicate polarity.

Range in Volts	List Price	Range in Volts	List Price
75	27.60 27.60	500 600 750	39.10

Voltmeters with a range above 150 volts are provided with external resistances.

• Delivery F. O. B. Factory, Newark, N. J. For warehouse deliveries write nearest house.



**Model 160** Voltmeter



Model 214 Frequency Indicator

### Weston Eclipse Voltmeters and Ammeters ECLIPSE MODEL 160 D. C. VOLTMETERS

NOTE: This model does not show polarity.

Range in Volts	List Price Each	Range in Volts	List Price Each
75		500. 600. 750.	\$47 15 49 45 51 75

Voltmeters with a range above 300 volts are provided with external resistances.

### **ECLIPSE MODEL 160 AMMETERS**

Note: This model does not show polarity.

Range in Amperes	List Price Each	Range in Amperes	List Price Each
1	<b>\$</b> 35 65	75	\$36 80
2	35 65	[ 100	37 95
3	35 08	150	<b>37</b> .9 <b>5</b>
5	34 50	200	39 10
10	34 50	250	40 25
15	34 50	300	41 40
25	34 50	400	42 55
50	36 80	500	44 85

### Weston Frequency Meters

### MODEL 214

These instruments are of a new type. Their indications are practically independent of changes of temperature voltage and wave form such as may be encountered in the commercial circuits of to-day. All meters are made for one voltage (100 to 125 volts), and for voltage ranges outside of this potential transformers must be used. Every frequency meter is provided with an external box which contains reactors and resistors.

Cycles	List Price Each
20	\$120.00
20	100.00
25	120.00
40	120.00
60	120.00
125	120.00
133	



### Model 151 Voltmeters and Ammeters

For Alternating Current Dimensions Model 151

Model	Diameter, Inches	Depth, Inches	Length of Scale Arc, Inches
151	9.506	3.150	6.5

These instruments are of the "soft iron" or "electromagnetic" type; however, they have unique electrical and mechanical characteristics, and in these respects they may be said to constitute an entirely new type of instrument. The indications of these instruments are accurate within less than 1 per cent., independent of changes in temperature, frequency or wave form within the range of commercial practice. They are equally as dead beat as the Weston moving coil D. C. instruments, and have scales that are open and fairly uniform throughout about % of the total range of deflection.

Voltmeters with a range above 300 volts are provided with external resistance coil.

Every ammeter is tested before shipment for insulation with 4,600 volts for one minute.

The case for each ammeter is provided with a "ground terminal," which must (in order to insure safety to the user) be connected to earth when the potential difference of circuits exceeds 200 volts. When properly erected, the ammeters are perfectly safe for use on circuits operating on a potential difference of 2,300 volts, but must be used with transformers on circuits of higher potential difference. Although there is economy in first cost and a slight advantage in accuracy in so doing, we are not in full accord with the practice of bringing to the front of the switchboard any device directly connected to the high potential circuits.

Transformers must be used on all circuits carrying over 500 amperes, and we recommend a value of 5 amperes for the secondary, and will calibrate the instrument so that it will be direct reading.

### **MODEL 151 AC VOLTMETERS**

Range in Volts	List Price, Each	Range in Volts	List Price, Each
75	\$42.55 42.55 43.13 51.75	500	\$60.95 63.25 69.00

### MODEL 151 AC AMMETERS

Range in Amps.	List Price, Each	Range in Amps.	List Price, Each
1	\$40.83 40.25 39.10 39.10 39.10 39.10 39.10 39.10 39.10	50	\$40.25 40.25 40.25 41.40 42.55 43.13 43.70 44.85 46.00
30	10.20		ماء

### Western Electric

### WESTON INSTRUMENTS



Model 156

### Weston Voltmeters and Ammeters

### For Alternating Current

These instruments are of the "soft iron" or "electromagnetic" type; however, they have unique electrical and mechanical characteristics, and in these respects they may be said to constitute an entirely new type of instrument. The indications of these instruments are accurate within less than 1 per cent. independent of changes in temperature, frequency or wave form within the range of commercial practice. They are equally as dead beat as the Weston moving coil D. C. instruments and have scales that are open and fairly uniform throughout about  $\frac{1}{2}$  of the total range of deflection.

Voltmeters with a range above 300 volts are provided with external resistance coil.

Every ammeter is tested before shipment for insulation with 4,600 volts for one minute.

The case for each ammeter is provided with a "ground terminal," which must (in order to insure safety to the user) be connected to earth when the potential difference of circuits exceeds 200 volts. When properly erected, the ammeters are perfectly safe for use on circuits operating on a potential difference of 2,300 volts, but must be used with transformers on circuits of higher potential difference. Although there is economy in first cost and a slight advantage in accuracy in so doing, we are not in full accord with the practice of bringing to the front of the switchboard any device directly connected to the high potential circuits.

Transformers must be used on all circuits carrying over 500 amperes, and we recommend a value of 5 amperes for the secondary, and will calibrate the instrument so that it will be direct reading.

These instruments are made in two models, which differ only in dimensions.

### MODEL 156 A. C. SWITCHBOARD VOLTMETERS

Range	*List Price	Range	*List Price
in Volts	Each	in Volts	Each
75	\$33 35 33.35 33 93 42 55	500	48 30

Voltmeters above 300 volts provided with external resistances.

### MODEL 156 A. C. SWITCHBOARD AMMETERS

Range	*List Price	Range	*List Price
in Amperes	Each	in Amperes	Each
1	31 63 31 05 31 05 31 05 31 05 31 05 31 05 31 05	50 75 100 150 200 250 300 400 500	31 63 31 63 32 78 33 93 34 50



Model 167 Single Phase Wattmeter

### Weston Wattmeters

### For Direct Current, Single Phase and Polyphase Circuits

These wattmeters have numerous advantages over any type previously built. They may be used with equal accuracy and without change of calibration on direct-current circuits or alternating-current circuits of any frequency, power-factor or wave form within the limits of usual commercial practice. The scale is uniform throughout the entire range of deflection. These wattmeters are made in two models.

### DIRECT CURRENT AND SINGLE PHASE WATTMETERS

### Model 167

All ranges are back connected. Meters above 300 volts range have external resistance box. For ranges above 750 volts potential transformers are used and for current ranges above 100 amperes current transformers must be used. For use with current transformers the 5-ampere range instrument is recommended. These instruments may also be had in full flush cases for a slight extra charge.

### 100 to 150 Volts

	•	100 to 150	Voits		
Amperes	Scale	List Price	Amperes	Scale	List Price
1		\$100.00	20	2 kilowatts	\$100.00
2		100.00	20		100.00
5		100.00	50		100.00
5		100.00	50	7.5 kilowatts	100.00
10		100.00	100		112,00
10	1.5 kilowatts	100.00	100	15 kilowatta	112.0
		200 to 30	0 Volts		
1	300 watts	\$112.00	20	6 kilowatts	\$112.00
2	600 watts	112.00	20	7.5 kilowatts	112.00
5	1 kilowatt	112.00	50	10 kilowatts	112.00
5		112.00	50	15 kilowatts	112.00
10	2 kilowatts	112.00	100	20 kilowatts	122.00
10		112.00	100	30 kilowatts	122.00
20	4 kilowatts	112.00		1	<u> </u>
		400 to 60	0 Volts		
1	600 watts	\$122.00	20	8 kilowatts	\$122.00
2	1.2 kilowatts	122.00	20	12 kilowatts	122.00
5	2 kilowatts	122.00	[ 50		122.00
5	3 kilowatts	122.00	50	30 kilowatts	122.00
10	4 kilowatts	122.00	100	40 kilowatts	134.00
10	6 kilowatts	122.00	100	60 kilowatts	134.00
		600 to 75	0 Volts		
1	750 watts	\$134.00	20	10 kilowatts	\$134.00
2		134.00	20	15 kilowatts	134.00
5	2.5 kilowatts	134.00	50	25 kilowatts	134.00
5	4 kilowatts	134.00	50	40 kilowatts	134.00
10	5 kilowatts	134.00	100	50 kilowatts	150.00
10	7.5 kilowatts	134.00	100 Digitized by	75 kilowatts	150.00



Model 216, Full-Front Type, Polyphase Wattmeter



Model 216, Semi-Flush Type, Polyphase Wattmeter

### Polyphase Wattmeters

### Model 216

These instruments have precisely the same characteristics as Model 167. They are regularly furnished with either one of two styles of case, namely full-front and semi-flush. The semi-flush type projects beyond the front of the board just sufficiently to bring the front of the instrument in the same plane with other Weston A. C. switchboard instruments. Full flush instruments may be had at slight extra cost.

### MODEL 216, SEMI-FLUSH OR FULL-FRONT CASE; TWO-PHASE OR THREE-PHASE

### 100 to 150 Volts

		100 10	100 10165		
Amperes	Scale	List Price	Amperes	Scale	List Price
5	1 kilowatt	\$140.00	20	7.5 kilowatts	\$140.00
5	1.5 kilowatts	140.00	50	10 kilowatta	140.00
10	2 kilowatts	140.00	50	15 kilowatts	140.00
10	3 kilowatts	140.00	100	20 kilowatts	150.00
20	4 kilowatts	140.00	100	30 kilowatts	150.00
<u>20</u>	6 kilowatts	140.00	ll		
		200 to	300 Volts		
5	2 kilowatts	\$150.00	20	12 kilowatts	\$150,00
5	3 kilowatts	150.00	50	20 kilowatts	150.00
10	4 kilowatts	150.00	50	30 kilowatta	150.00
10	6 kilowatts	150.00	100	40 kilowatts	160.00
20	8 kilowatts	150.00	100	60 kilowatts	160.00
			600 Volts Il Resistor		
5	4 kilowatts	\$160.00	20	30 kilowatts	\$160.CO
5	6 kilowatts	160.00	50	40 kilowatts	160.00
10	8 kilowatts	160.00	50	60 kilowatts	160.00
10	12 kilowatts	160.00	100	80 kilowatts	170.00
20	20 kilowatts	160.00	100	120 kilowatts	170.00

### 600 to 750 Volts External Resistor

5	5 kilowatts	\$170.00	20	30 kilowatts	\$170.00
5	7.5 kilowatts	170.00	50	50 kilowatts	170.00
10	10 kilowatts	170.00	50	75 kilowatts	170.00
10			100	100 kilowatts	180.00
20	20 kilowatts	<b>170</b> .00	100 Digitized b	150 kilowatts	180.00



Model 226 Synchroscope



Model 215
Power-Factor Meter

### Weston Synchroscope

MODEL 226

This synchroscope is of a distinctly new type. It consists of a phase angle indicator mounted with its pointer behind a ground glass scale and illuminated by a small synchronizing lamp installed behind the pointer and connected to synchronize light. A difference in frequency between two machines causes the pointer to swing back and forth, but owing to the fact that the lamp is lighted only half the time the pointer is seen only during every other swing and thus appears to rotate continuously in one direction. When the machines have the same frequency, but are out of phase, the pointer comes to rest at one side or the other of the middle of the scale. Perfect synchronism is indicated by the pointer remaining at rest in the middle of the scale with the lamp lighted.

The pointer is only visible when the synchronizing lamp is lighted. The indications of the instrument

are absolutely infallible.

Every synchroscope includes a lamp transformer, a condenser and a resistor mounted in a separate box. These instruments are made only for one voltage (100 to 125 volts), and when used for other voltages they must be operated with potential transformers. The instruments can be calibrated for any frequency.

Description	List Price Complete
Made for 110 to 125 volts and any commercial frequency up to 150 cycles. Specify the voltage and frequency in every case	\$125.00

## Weston Power-Factor Meter MODEL 215

By virtue of a novel mode of construction the Weston Power-Factor Meter has been rendered practically perfect in its operation. From  $\frac{2}{10}$  load to full load it indicates the true phase angle to within 1 per cent. independent of any variable conditions found on ordinary commercial circuits. Polyphase power-factor meters may be used on any commercial frequency. Single phase meters require a phase-splitting device and, therefore, must be calibrated for the frequency at which they are to operate. The following ranges are regularly carried in stock: 25, 40, 50, 60, 125 and 133 cycles per second. Polyphase power-factor meters are arranged for the following systems: two-phase, three-wire and three-phase, three-wire for balanced loads. Meters above 150-volt range are equipped with external resistance box. All meters have the same kind of scale, reading from 0.50 lag to 0.50 lead. Special scales for power-factors as low as 0.30 may be had at slight extra cost. This instrument may also be arranged as a sine or cosine meter.

Two phase, four wire meters are made for circuits up to 300 volts only. For circuits higher than 300 volts, use two phase, three wire, 110 volt instrument with two potential transformers.

Polyphase instruments are made for balanced load only.

### 100 to 150 Volts Self-Contained

### 200 to 300 Volts With External Resistance

Amperes	List Price Polyphase	List Price Single Phase	Amperes	List Price Polyphase	List Price Single Phase
5	\$110.00 110.00	\$130.00 130.00	5	\$120.00 120.00	\$140.00 140.00
20	120.00	140.00	20	130.00	150.00
50	120.00 130.00	140.00 150.00	50 100	130.00 140.00	150.00 160.00

	400 to 600 Volts With External Resistance			0 Volts al Resistance	
5	\$140.00	\$160.00	5	\$150.00	\$170.00
10		160.00	10		170.00
20		170.00	20	160.00	180.00
50	150.00	170.00	50	_160 00 ⊤	180.00
100	160.00	180.00	100 Digitized h	( -170,000 A	190.00

\*List Price

\$24 15

24 15

24 15

24 15

24 15

24 15

24.15 24.15

Each

Model 267 Voltmeter Front View

### WESTON MINIATURE PRECISION INSTRUMENTS

For Direct Current

## Model 267 Switchboard Voltmeters, Ammeters and Mil-Ammeters

This group of instruments consists of a variety of ranges of small switchboard ammeters and voltmeters suitable for use in small isolated lighting plants, small power plants, signal systems, battery charging panels and for all kinds of service where small switchboard indicating instruments are needed.



Model 267 Voltmeter Rear View

#### MODEL 267 SWITCHBOARD VOLTMETERS \*List Price \*List Price Range Range Range Each Each **\$**24 15 1 \$24 15 7.5 50 24 15 24 15 1.2 24 15 60 $\overline{24}$ $\overline{15}$ 10 75 1.5 24 15 24 15 80 12 $\frac{2}{3}.5$ 24 15 24 15 100 15 24 15 24 15 20 120

25

30

24 15

24 15

15

4

5

6



Model 267 Ammeter Front View

### MODEL 267 SWITCHBOARD AMMETERS

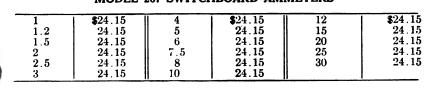
24 15

24 15

24 15

130

150





Model 267 Ammeter Rear View

### **MODEL 267 MIL-AMMETERS**

Note: For higher ampere readings the Model 267 will be furnished as a milli-voltmeter adjusted to external shunts. Information and prices relative to such instruments will be supplied upon application.

MODEL 268 SWITCHBOARD VOLT-AMMETERS

Dimensions.—Vertical, 3.35 inches; horizontal, 4.1 inches; depth, 1.1 inches.



Model 268 Volt-Ammeter Front View

*List Price	ige	Ran	****	Range	
Each	Amperes	Volts	*List Price Each	Amperes	Volts
\$36.80	10-0-30	5-0-15	\$36.80	10-0-15	10-0-15
36.80	5-0-10	5-0-10	36.80	2-0-3	10-0-15
36.80	2-0-4	10-0-20	36.80	20-0-30	10-0-15
36.80	1-0-2	5-0-10	36.80	7.5-0-15	7.5-0-15
36.80	10-0-20	5-0-10	36.80	15-0-30	7.5-0-15
36.80	5-0-10	10-0-20	36.80	1.5-0-3	7.5-0-15
36.80	1-0-2	10-0-20	36.80	7.5-0-15	1.5-0-3
36.80	10-0-20	10-0-20	36.80	1-0-3	5-0-15



Model 268 Voit-Ammeter Rear View

nea

0 0 10   1 0	3   33.tm		
Dimensions.—Ver	rtical, 4.25 inches; hori	zontal, 4.2 inches; de	pth, 1.35 inches.
*Delivery F. O. B.	Factory, Newark, N.	J. For warehouse	deliveries write
arest house.		Digitized by GOO	gle

### WESTON MINIATURE PRECISION INSTRUMENTS

For Direct Current

### Model 280—Portable Instruments

These instruments are all the same size and can be carried in an ordinary coat pocket. They are made in a great many varieties of ranges and are admirably adapted to all kinds of commercial and experimental testing that falls within their limits of e. m. f. and current.

### SINGLE RANGE MILLI-VOLTMETERS

I Tigt II

Single Range Voltmeter



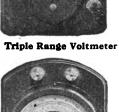
Volts	Price Each	Volts	Price Each	Volts	Price Each
† 50	\$28.75	†120	\$28.75	†300	\$28.75
† 60	28.75	†130	28.75	†400	28.75
† 75	28.75	†150	28.75	†500	28.75
† 80	28.75	†200	28.75	†600	28.75
†100	28.75	†250	28.75	†750	28.75

SINCLE DANCE VOLTMETERS

Double Range Voltmeter



	31110	LE RANGE	AOLIMETERS		
1	\$28.75	7.5	\$28.75	50	132
1.2	28.75	8	28.75	60	
1.5	28.75	10	28.75	75	2.25
2	28.75	12	28.75	80	203
2.5	28.75	15	28.75	100	23.75
3	28.75	20	28.75	120	28375
4	28.75	25	28.75	130	28/75
5	28.75	30	28.75	150	28.75
6	28.75	40	28.75		1 .
	DOU	BLE RANGE	VOLTMETERS	 S	, ,



20-2	\$33.35	30-3	<b>\$</b> 33.35	80-8	\$33.35
20-8	33.35	50-2.5	33.35	100-10	33.35
<b>25–2</b> .5	33.35	50-5	33.35	150-15	83,35



30-3-1.5   37.95   50-5-2.5   37.95   100-25-2.5   37.95   30-6-3   37.95   50-25-5   37.95   150-15-1.5   37.95	TRIPLE RANGE VOLIMETERS							
30-15-3 37.95    50-25-10   37.95    150-15-3   37.9	30- 3-1.5	37.95	50- 5-2.5	37.95	100-25-2.5	\$37.95 37.95 37.95 37.95		

1.2

1.5

2 2.5

3

SINGLE RANGE MIL-AMMETERS

* 50	1 \$28.75 H	*120	1 <b>\$</b> 28.75	*300	\$28.75
* 60	28.75	*130	28.75	*400	28.75
* 75	28.75	*150	28.75	*500	28.75
* 80	28.75	*200	28.75	*600	28.75
*100	28.75	*250	28.75	*750	28.75

Single Range Ammeter



SINGLE RANGE AMMETERS \$28.75 4 \$28.75 \$28.75 28.75 28.755 28.7515 28.75 28.75 28.75 6 20 28.75 7.5 28.75 25 28.75 28.**75** 28.75 30 28.75 8 28.75 10 28.75

\$33.35 33.35 33.35

Double Range Ammeter

DOUBLE RANGE AMMETERS							
1-0.1 2.5-0.25	\$33.35 33.35	8-2 10-1	\$33.35 33.35	25-2.5 25-5			
5-0.1 5-0.5	33.35 33.35	15-1.5 20-2	33.35 33.35	30-3			



TRIPLE RANGE AMMETERS					
5-2.5-0.25 10-1-0.1 10-1-0.5 10-2.5-1 15-3-0.150	\$37.95 37.95 37.95 37.95 37.95	20-4-2 20-8-2 25-2.5-0.5 25-5-2.5 25-10-2.5 25-10-5	\$37.95 37.95 37.95 37.95 37.95 37.95 37.95	30-3-1.5 30-6-3 30-15-3 15-3-1.5	\$37.95 37.95 37.95 37.95

† Milli-volts. \* Milli-amperes.

Dimensions.—Vertical, 4.6 inches; horizontal, 4.4 inches; depth, 1.5 inches. †Delivery F. O. B. Factory, Newark, N. J. For warehouse deliveries write Triple Range Ammeter nearest house. Leather carrying case for model 280, \$5.93 extra.

## WESTON MINIATURE PRECISION INSTRUMENTS

#### For Direct Current

#### Model 280—Portable Volt-Ammeters

These instruments possess the same characteristics and advantages as the switchboard instruments. They should be of great value in many kinds of commercial testing where the simultaneous reading of current and e. m. f. is not necessary.

SINCLE	RANGE	VOLT.	AMMETERS



Single Range Volt-Ammeter

List Pri	inge	Ra	List Price	inge	Ra
Each	Amperes	Volts	Each	Amperes	Volts
\$43.7	4	20	\$43.70	3	1.5
43.7	20	20	43.70	1.5	3
43.7	1	25	43.70	3	3
43.7	5	25	43.70	12	3 3 3 3
43.7	25	25	43.70	12 15	3
43.7	1.5	30	43.70	30	3
43.7	3	30	43.70	8	4
43.7	6	30	43.70	1 5 10	4 5 5 5
43.7	30 2	30	43.70	5	5
43.7	2	40	43.70	10	5
43.7	8	40	43.70	6	6
43.7	20	40	43.70	12	6
43.7	1	50	43.70	30	6
43.7	5	50	43.70	1.5	7.5
43.7	10	50	43.70	7.5	7.5
43.7	25	50	43.70	15	7.5
43.7	3	60	43.70	2	
43.7	15	60	43.70	15 2 4 8	8 8 8
43.7	30	60	43.70	8	8
43.7	15	75	43.70	20	8
43.7	20	80	43.70	1	10
43.7	1	100	43.70	5	10
43.7	10	100	43.70	1 5 10	10
43.7	25	100	43.70	25	10
43.7	3	120	43.70	30	12
43.7	12	. 120	43.70	1.5	15
43.7	30	120	43.70	3	15
43.7	1.5	150	43.70	7.5	15
43.7	3	150	43.70	15	15
43.7	15	150	43.70	30	15
43.7	30	150	43.70	2	20



Double Range Volt-Ammeter

DOUBLE RANGE VOLT-AMMETERS							
20-2	8-2	\$52.90	50-5	5-0.1	\$52.90		
20-8	20-2	52.90	50-5	10-1	52.90		
25 - 2.5	2.5-0.25	52.90	50-5	25-2.5	52.90		
25-2.5	5-0.5	52.90	50-5	25-5	52.90		
25-2.5	25-2.5	52.90	80-8	20-2	52.90		
30-3	15-1.5	52.90	100-10	25-2.5	52.90		
30-3	30-3	52.90	150-15	15-1.5	52.90		
50-2.5	5-0.5	52.90	150-15	30-3	52.90		
50-5	1-0.1	52.90	1000	/	,		

TRIPLE RANGE VOLT-AMMETERS



Triple Range Volt-Ammeter

Ra	nge	List Price	R	ange	List Price
Volts	Amperes	Each	Volts	Amperes	Each
25-10-2.5	10-2.5-1	\$62.10	50-25-2.5	25-2.5-0.5	\$62.10
30-3-1.5	30-3-1.5	62.10	50-25-5	25-5-2.5	62.10
30-6-3	30-6-3	62.10	50-25-10	10-1-0.5	62.10
30-15-3	15-3-0.150	62.10	50-25-10	10-2.5-1	62.10
30-15-3	30-15-3	62.10	50-25-10	25-10-5	62.10
40-20-4	20-4-2	62.10	80-20-4	20-8-2	62.10
50-5-2.5	5-2.5-0.25	62.10	100-25-2.5	25-10-2.5	62.10
50-5-2.5	10-1-0.1	62.10	150-15-1.5	30-3-1.5	62.10
50-5-2.5	25-5-2.5	62.10	150-15-3	15-3-1.5	62.10
50-25-2.5	10-5-0.5	62.10	150-15-3	30-3-1.5	62.10

Model 280 Instruments can also be supplied in the following ranges: Single range ammeters with external shunts, 50, 75, 100 and 150 amperes, \$34.50 list. Double range voltmeter with ranges of 150-3 volts, \$33.35 list. Triple range volt-ammeters with ranges 150-15-1.5 volts, 30-15-1.5 amperes, \$62.10 list. All portables can be supplied with leather cases when so ordered at an additional pharms of the list private of \$1.72

ditional charge to the list price of \$1.73.

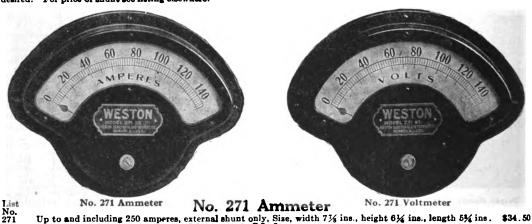
Dimensions.—Vertical, 4.6 inches; horizontal, 4.4 inches; depth, 1.5 inches. Delivery F. O. B. Factory, Newark, N. J. For warehouse deliveries write nearest house.

## MEASURING AND TESTING INSTRUMENTS



	No. 269 Ammeter		No. 269 V	oltmet <b>er</b>	
List No. 273	No. 273 Ammeter Up to and including 250 amperes, external abunt	9 4 ins.	Height 711 ins.	Scale Length 7½ ins.	List Price Each \$51.75
	No. 273 Voltmeter	)			
273 273 273 273	Up to and including 150 volts, self contained. From 150 volts to 300 volts, self contained. From 300 volts to 600 volts, (external resistance box used) From 600 volts to 750 volts, (external resistance box used)	9 % ins. 9 % ins. 9 % ins. 9 % ins.	711 ins. 711 ins. 711 ins. 711 ins.	7¼ ins. 7¼ ins. 7¼ ins. 7¼ ins.	\$57.50 64.40 75.90 80.50
	No. 269 Ammeter				
269 269	Up to 50 amperes, self contained only	5% ins. 5% ins.	4 1 ins. 4 1 ins.	4 ins. 4 ins.	\$29.90 33.35
	No. 269 Voltmeter	•			
269 269 269 269	Up to and including 150 volts, self contained. From 150 volts to 300 volts inc., self contained From 300 volts to 600 volts inc. (external resistance box)	5% ins. 5% ins. 5% ins. 5% ins.	4 16 ins. 4 16 ins. 3 16 ins. 4 16 ins.	4 ins. 4 ins. 4 ins. 4 ins.	\$31.05 37.95 49.45 51.75
	These instruments can be furnished in higher ranges when used with exter	nal shunts.	To obtain	the price	deduct the

These instruments can be furnished in higher ranges when used with external shunts. To obtain the price deduct the price of the shunt from the price of the instrument as listed above and add to this the price of the shunt of the range desired. For price of shunt see listing elsewhere.



26-1

#### WESTON MINIATURE PRECISION INSTRUMENTS

For Direct Current





Ammeter

#### Model 279—Portable Battery Testers

These instruments consist of a battery testing voltmeter and a variety of ranges of ammeters. They are designed to facilitate the accurate and rapid testing of single cells of storage and other batteries. The voltmeter is provided with a special detachable spike terminal, designed to minimize the time required to make a test. In form it resembles somewhat a speed indicator, and is extremely convenient to manipulate and to read.

The ammeter also has conveniently arranged binding-post, but otherwise it resembles in general appearance the switchboard instruments. The form of the case of both the voltmeter and the ammeter is convenient to hold in the hand, thus adding much to the general usefulness of the instruments.

#### **VOLTMETERS**

	Range Volts	*List Price Each
Voltmeter	3-0-3	\$25.30

#### ZERO CENTER AMMETERS

Range	*List Price	Range	*List Price
Amperes	Each	Amperes	Each
1-0-1. 1.5-0-1.5. 2-0-2. 3-0-3. 5-0-5.	25.30 25.30 25.30	7.5-0-7.5	25.30 25.30 25.30

#### ZERO LEFT AMMETERS

1	\$25.30	7.5	\$25.30
1.5	25.30	10	25.30
2	<b>25</b> .30	15	25.30
3	25.30	20	25.30
4	25.30	25	25.30
5	25.30	30	25.30

#### **DIMENSIONS**

#### Voltmeters

Vertical case only, 3.5 inches, with terminal, 4.9 inches; horizontal, 4.2 inches; depth, 1.35 inches.

#### Ammeters

Vertical, 3.7 inches; horizontal, 4.2 inches; depth, 1.4 inches.

Model 279 voltmeters for other ranges than 3-0-3 will be supplied within practical limits, prices for which will be quoted upon request.

All portable voltmeters will be supplied with leather cases when so ordered at an additional charge to the list price of \$4.60.

\*Delivery F. O. B. Factory, Newark, N. J. For warehouse deliveries write mearest house.

#### **DUNCAN WATTHOUR METERS**

#### Direct Current



Model E, Small Size, With Cover in Position



Model E, Small Size, With Cover Removed

#### Models E, EA and ER

The Duncan Direct Current Watthour Meter has now been on the market for twelve years. Its design has been kept strictly in conformity with the growing demands of the central station. It gives correct registration on small loads.

The field coils of model E are traversed by the main current supplied to the translating devices, such as lamps, motors, etc., and the armature is energized by a current proportional to the pressure in volts, and having a resistance in series with it for the purpose of keeping the shunt current as small as possible. The Model ER is of the shunted type and a portion only of the main current traverses its field coils.

Armature. The armature for the various model E meters is wound with No. 40 B&S silk insulated electrolytic copper wire. After being wound they are thoroughly insulated with the best grade of pure grain alcohol orange shellac, then baked at a moderate heat for ten hours. After this they are aged by storing for six months before being assembled in the meters.

Commutator. The commutators are made from hard drawn silver that has a guaranteed fineness of .9995.

Field Coils. They are machine wound with double cotton covered magnet wire and of such a cross section that when the meter is loaded to full capacity, it does not exceed 600 amperes per square inch.

Brushes. The brushes are provided with a micrometer adjustment device situated at the front of the meter where it is readily accessible. The brush arms proper are phosphor-bronze wire having silver tips where they make contact with the commutator. Attached to each brush support is a long coiled spring, also of phosphor-bronze, which acts to equalize the tension of the brushes upon the commutator and to maintain such pressure at a constant value.

Permanent Magnets. They are made from special tungsten steel and strictly in accordance with a special formula.

Jeweled Bearings. It being imperative that the friction of the main revoluble element, comprising the spindle, worm, commutator, armature, and disk which it carries, be as small as possible, a cupped jewel bearing made from Australian sapphire is used. In the larger sizes of house type meters, that is, above 100 amperes, and all sizes in the switchboard types, a cupped diamond bearing is used.

Light Load Compensating Switch. This switch controls the number of turns in the compensating coil that is situated within the front series field coil, and moving the little lever or arm either cuts in or cuts out turns of the compensating coil. This switch is employed to adjust, when necessary, the meter to accuracy on light load.

See following page for prices

See following page for prices.

#### **DUNCAN WATTHOUR METERS**

Direct Current

#### E, EA and ER Continued

Models "E and EA" meters are of the series type, and are made for capacities as shown in the price list. They develop a driving torque or power of not less than 150 millimeter grams, thus continued accuracy is assured. The Model "E" meters are also made with ASTATIC FIELD COILS and ARMATURE in sizes including 25 amperes and larger, and when this feature is wanted, please specify MODEL "EA."

Model ER is of the shunted type and is provided with a shunt that is connected in series in the main feeder or line, and having flexible cables that connect it with the field coils of the meter. This arrangement allows only a portion of the main current from the circuit to pass through the field coils of the Model ER, and for this reason it adapts it most admirably for heavy currents, and we are prepared to furnish it for any capacity up to and including 30,000 amperes at either 110, 220 or 500 volts. The armature in the Model ER is slightly different from the armature employed in the other series type models. Its form resembles that of a squirrel cage, instead of the coils being wound around the armature the same as is practiced in the building of a form wound armature for dynamos, and for this reason repairs to the armature are easily taken care of and made at small expense.

MODEL E

	110 to 125 Volts 2 Wire		220 to 250 Volts 2 Wire		500 to 600 Volts 2 Wire		'220 to 250 Volts 3 Wire	
Amperes	—List Pri	ce Each——	List Price Each		—List Price Each—		—List Price Each—	
	Model E	Model EA	Model E	Model EA	Model E	Model EA	Model E	Model EA
5	\$28.12		\$32.62		\$41.62		\$32.62	
10	30.60		36.00		46.36		36.00	<b></b>
15	<b>34</b> .66		42.52		54.46		42.52	• • • • •
25	40.50	<b>\$</b> 45.90	50.40	\$55.80	64.36	\$71.00	50.40	<b>\$5</b> 5.80
50	52.42	58.50	62.32	69.30	79.20	86.40	64.36	71.10
<b>7</b> 5	67.50	75.60	79.20	87.30	94.06	103.50	84.16	92.10
100	81.00	90.90	92.26	101.70	108.00	118.80	99.00	108.80
150	92.26	102.60	106.20	117.00	119.26	131.40	113.40	125.10
200	103.50	115.20	121.50	134.10	139.50	153.90	135.00	148.50
300	117.00	129.60	135.00	149.40	162.00	178.10	157.50	173.70
400	135.00	151.20	153.00	168.30	175.50	183.50		
500	153.00	171.00	171.00	189.00	184.50	203.40		
600	171.00	193.50	189.00	207.00	198.00	218.70		

#### **MODEL ER**

100	<b>\$</b> 157.50	\$166.50	\$180.00	\$211.50
150	162.00	171.00	184.50	225.00
200	166.50	180.00	193.50	238.50
300 l	175.50	193.50	202.50	265.50
400	184.50	202.50	211.50	283.50
500 l	193.50	207.00	220.50	292.50
600	202.50	211.50	225.00	310.50
800 l	207.00	220.50	229.50	324.00
000	211.50	225.00	238.50	333.00
200	220.50	229.50	247.50	351.00
500	225.00	238.50	252.00	360.00
000	238.50	252.00	265.50	387.00
500	252.00	265.50	279.00	414.00
000	265.50	283.50	292.50	441.00
000 l	292.50	310.50	324.00	495.00
000	333.00	351.00	360.00	571.50

<sup>\*</sup>Delivery F. O. B. Factory, Lafayette, Ind. For warehouse deliveries, write nearest house.

#### **DUNCAN SWITCHBOARD WATTHOUR METERS**







Model F

### Models F and FR

Model FR

Model F meters are of the series type and include sizes from 100 amperes to 600 amperes, 2 wire, and from 100 amperes to 300 amperes, 3 wire. The case or cover for this model is similar to the one provided with the Model "FR" as shown in the cut.

Model FR meters are of the shunted type and include sizes from 100 to 20,000 amperes.

The Model F and FR are finished in frosted nickel and hard rubber black, and are provided with a sheet metal cover having an all glass window in the front only. The cover and the base are finished in hard rubber black, which is both neat and durable.

In furnishing Model FR meters we supply them with shunt leads or connecting cables 5 feet in length, so if additional lengths are required, please specify same when ordering, and for which an extra charge is made.

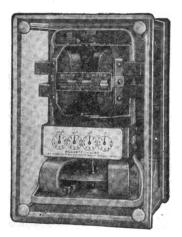
#### MODEL F

	Am-	110 to 125 Volts 2 Wire	220 to 250 Volts 2 Wire	500 to 600 Volts 2 Wire	220 to 250 Volts 3 Wire	440 to 500 Volta 3 Wire			
Model	peres	*List Price	*List Price	*List Price	*List Price	*List Price			
F	100	\$114.30	\$126.00	\$139.50	\$162.00	\$171.00			
$\mathbf{F}$	150	126.00	138.60	151.20	180.00	189.00			
F	200	135.00	151.20	166. <b>50</b>	193.50	202.50			
F	300	148.50	164.70	182.70	216.00	211.50			
F	400	162.00	175.50	193.50					
F	500	175.50	187.20	205.20					
F	600	187.20	200.70	211.50					
-	MODEL FR								

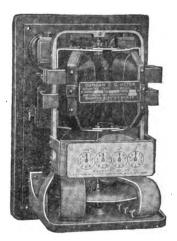
	MODEL FR								
FR	100	\$162.00	\$171.00	\$180.00	\$220.50	\$229.50			
$\mathbf{F}\mathbf{R}$	150	166.50	175.50	184.50	234.00	243.00			
$\mathbf{F}\mathbf{R}$	200	171.00	184.50	193.50	247.50	256.50			
$\mathbf{F}\mathbf{R}$	300	180.00	198.00	207.00	274.50	283.50			
$\mathbf{F}\mathbf{R}$	400	189.00	207.00	216.00	292.50	301.50			
$\mathbf{F}\mathbf{R}$	500	198.00	211.50	220.50	301.50	310.50			
$\mathbf{F}\mathbf{R}$	600	207.00	216.00	225.00	319.50	328.50			
$\mathbf{F}\mathbf{R}$	800	216.00	225.00	234.00	333.00	342.00			
$\mathbf{F}\mathbf{R}$	1000	225.00	229.50	238 50	342.00	351.00			
$\mathbf{F}\mathbf{R}$	1200	229.50	234.00	243.00	360.00	369.00			
$\mathbf{F}\mathbf{R}$	1500	238.50	243.00	252.00	369.00	378.00			
$\mathbf{F}\mathbf{R}$	2000	256.50	261.00	270.00	396.00	405.00			
FR	2500	265.50	270.00	279.00	423.00	432.00			
$\mathbf{F}\mathbf{R}$	3000	283.50	288.00	297.00	450.00	459.00			
$\mathbf{F}\mathbf{R}$	4000	310.50	315.00	324.00	504.00	513.00			
FR	5000	351.00	355.50	364.50	580.50	589.50			
$\mathbf{F}\mathbf{R}$	6000	387.00	396.00	405.00	661.50	670.50			
$\mathbf{F}\mathbf{R}$	8000	432.00	441.00	450.00	747.00	756.00			
FR	10000	477.00	486.00	495.00	832.50	841.50			
FR	12000	522.00	531.00	<b>54</b> 0.00	918.00	927.00			
FR	15000	585.00	594.00	603.00	1008.00	1017.00			
FR	20000	639.00	652.50	661.50	1125.00	1134,00			

## **DUNCAN SWITCHBOARD WATTHOUR METERS**

Direct Current







Model R. Glass Cover Removed

#### Model R

All Model R watthour meters are of the shunted type.

They are provided with a neat all plate glass cover and the magnet shelf, back support, field coils, magnets and practically all metal parts, with the exception of four large copper terminals, are finished in hard rubber black. If specially called for, the Model R will be finished in polished nickel and hard rubber black, or polished copper and hard rubber black or polished brass and hard rubber black. Any one of these special finishes will be furnished without extra charge if specially called for, otherwise the standard hard rubber black finish will be supplied.

Five foot calles are provided with each meter as a standard length and for additional lengths an extra

Five foot cables are provided with each meter as a standard length and for additional lengths an extra

charge will be made.

	Am-	110 to 125 Volts 2 Wire	220 to 250 Volts 2 Wire	500 to 600 Volts 2 Wire	220 to 250 Volts 3 Wire	440 to 500 Volts 3 Wire
Model	peres	*List Price	*List Price	*List Price	*List Price	*List Price
		11.00	1	1	1 11100	11100
$\overline{R}$	100	\$171.00	\$180.00	\$189.00	\$229.50	\$238.50
$\mathbf{R}$	150	175.50	184.50	193.50	243.00	252.00
R	200	180.00	193.50	202.50	256.50	265.50
R R R R R R	300	189.00	207.00	216.00	283.50	292.50
${f R}$	400	198.00	216.00	225.00	301.50	310.50
R	500	207.00	220.50	229.50	310.50	319.50
$\mathbf{R}$	600	216.00	225.00	234.00	328.50	337.50
$\mathbf{R}$	800	225.00	234.00	243.00	342.00	351.00
$\mathbf{R}$	1000	234.00	238.50	247.50	351.00	360.00
R	1200	<b>238</b> .50	243.00	252.00	369.00	378.00
R R	1500	247.50	252.00	261.00	378.00	387.00
R	2000	<b>265</b> .50	270.00	279.00	405.00	414.00
$\mathbf{R}$	2500	<b>274</b> .50	279.00	288.00	432.00	441.00
R	3000	<b>292</b> .50	297.00	306.00	459.00	468.00
$\mathbf{R}$	4000	319.50	324.00	333.00	513.00	522.00
$\mathbf{R}$	5000	360.00	364.50	373.50	589.50	598. <b>50</b>
R R	6000	396.00	405.00	414.00	670.50	679.50
R.	8000	441.00	450.00	459.00	756.00	765.00
R R R R	10000	486.00	495.00	504.00	837.00	850.50
ĸ	12000	535.50	549.00	558.00	945.00	958.50
R	15000	598.50	612.00	625.50	1107.00	1120.50
_R_	20000	801.00	810.00	828.00	1305.00	1318 50

<sup>\*</sup>Delivery F. O. B. Factory, Lafayette, Ind. For warehouse deliveries, write nearest house.

#### NET EXTRA COST OF SHUNT CABLES (In Excess of 5 Feet)

#### For Models FR and R Meters

Length	Price	Length	Price
6	\$0.96	14	\$8.47
8	3.55	16	10.40
10	4.40	18	13.37
12	6.67	20 Digitized by GOOGIC	15.38

#### DUNCAN PORTABLE TEST WATTHOUR METERS

Direct Current

#### Model HC



Model HC

This meter involves the same theory of operation as all Duncan commutator type direct current watthour meters. The current upon entering the meter is controlled by the cylindrical switch at the rear, and the spring contacts resting against it operate to arrange the windings of the series field coils for the different loads. For example, when the switch is set for minimum load, all of the windings of the field coils are in series, and when the switch is set for maximum capacity, all of these coils are in multiple. This arrangement gives maximum torque for the different capacities, and herein lies the success attending the use of the Duncan Portable Watthour Meter. At the top of the meter and immediately behind the dial is situated the series binding posts, and the handle for the controller switch. Attached to this handle is a marked index which shows the capacity in amperes, and the setting of this index for any desired load is the simplest operation possible. There is also provided a knife switch arrangement for shortcircuiting the series field coils of the meter, and is used when changing the load so as to avoid opening the work circuit. For example, before changing from one load to another, this knife switch is closed, then the controller switch is set for the desired load, then after such load has been applied, the short-circuiting switch is opened and permits the current from the work circuit to pass through the series field coils. The dial is the "fly-back" type, as is found in stop watches, and the Duncan Company was the first to employ and embody this novel mechanism in its meters, which allows the meter man to start off from zero with every test.

A heat switch is provided by the use of which much time is saved and the instrument rendered more accurate. By pressing down this switch and giving it a slight turn to hold it in place, the armature of the standard is quickly brought up to operating temperature, thus eliminating errors due to the temperature coefficient of copper.

This instrument is started and stopped by means of a snap switch whose design is such that the potential circuit is always closed except when pressure is applied to the push button. This feature is another aid to accuracy as it keeps the armature from cooling off between runs.

List No.	Amperes	Volts	*List Price
321400	1-2-5-10-25-50	110	\$191.25
321401	1-2-5-10-25-50	220	<b>20</b> 2.50
321402	1-2-5-10-25-50	500	213.75
321403	1-2-5-10-25-50	110-220	225.00
321404	1-2-5-10-25-50	110-500	<b>23</b> 1.75
321405	1-2-5-10-25-50	220-500	236.25
321406	1-2-5-10-25-50	110-220-500	247.60
321407	5-10-25-50-100	110	213.75
321408	5-10-25-50-100	220	225.00
321409	5-10-25-50-100	500	236.25
321410	5-10-25-50-100	110-220	247.50
321411	<b>5-10-25-50-10</b> 0	110-500	<b>254</b> .25
321412	5-10-25-50-100	220-500	258.75
321413	5-10-25-50-100	110-220-500	270.00

<sup>\*</sup>Delivery F. O. B. Factory, Lafayette, Ind. For warehouse deliveries, write nearest house.

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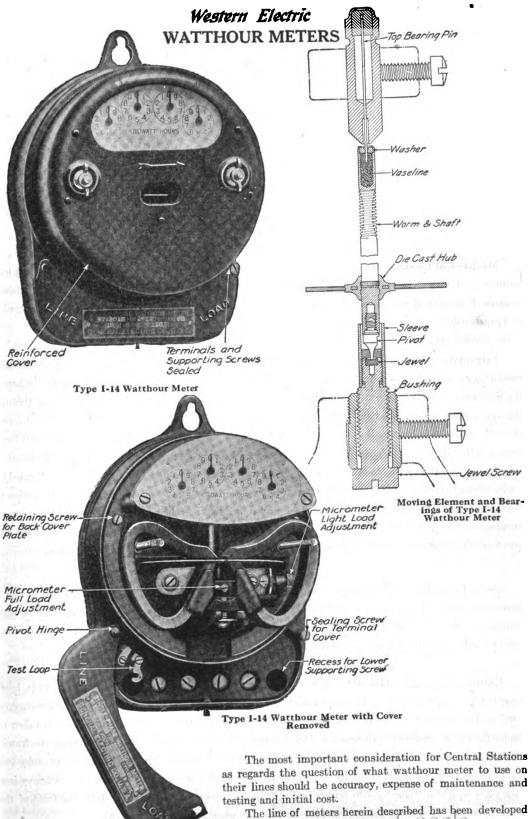
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Western Electric

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Measuring and Testing Instruments

# Western Electric Western Electric WATTHOUR METERS

#### ALTERNATING CURRENT

#### SINGLE PHASE—HOUSE TYPE

#### TYPE I-14

The Type I-14 single phase watthour meter operates on the induction principle, so that there are no moving electrical contacts. It is built in self contained sizes of from 5 to 300 amperes, 100 to 600 volts, and for all standard frequencies. The adoption of this meter as standard by many of the largest central stations indicates a universal appreciation of the superiority of this type.

Mechanical Construction. The base, including the terminal chamber, is formed by a central iron casting which also serves as a housing for the meter and supports the complete motor element, damping magnets, bearings and mechanism. This construction gives a compact meter with all parts readily accessible and practically eliminates the possibility of getting out of allignment during shipment.

Terminals. 5 to 75 amperes. Four brass terminals are permanently moulded in a non-combustible insulating compound, thus providing excellent insulation and preventing accidental short circuiting across the terminals. The leads enter from the bottom. In two-wire meters, both sides of the line pass through the meter, while in three-wire meters both "outers" pass through, and the potential coil is connected across these "outers." The cover of the terminal chamber is of punched drawn steel, hinged at the upper left hand corner, so that it swings down out of the way when connections are being made, but cannot become detached from the meter. It is held in the closed position by a screw through the upper right hand corner and sealed by a wire through the screw and a projecting lug on the cover. The terminal chamber contains, in addition to the terminals, two holes for the lower supporting screws, so that when the meter is in place, the lower screws are always under seal. A testing loop is also contained in the chamber. By means of this test loop, the potential circuit of the meter may be opened, and any number of meters may be tested in series.

100 to 300 amperes. The larger currents dealt with in the 100 to 300 ampere sizes necessitate a somewhat different construction of terminal chamber, although these larger sizes all possess the notable features mentioned under 5 to 75 amperes, i.e., separately sealed terminal chamber, lower supporting screws under seal and test loop. See dimensions page elsewhere

Covers. The Type I-14 meter may be furnished with metal or glass covers; the metal cover is, however, the most popular type. This is of drawn sheet metal and cylindrical in shape, with glass covered openings for reading the register and observing the rotation of the disc. Every precaution is taken to render the cover absolutely dust-proof, a thick felt gasket being used where the cover rests on the frame, and the glass is deeply embedded in putty and held by a punched frame. The cover is held in place by two seal pins and wing nuts and sealed by passing a seal wire through the wing nuts and pins. A heavy iron back plate is held in place by two screws in the 5 to 75 ampere meters entering from the front of the central casting. Access to these screws may be had only when the cover is removed.

## Western Electric

#### WATTHOUR METERS (Continued)

Register. The register is of the four dial type and consists essentially of two parts rigidly fastened together. The entire mechanism is fastened to the base by two screws and can be removed or replaced very readily. A micrometer adjustment is provided for the mesh of the worm on the disk shaft with the worm wheel. This mesh, and in fact the entire register mechanism, is visible when cover is removed. The small number of moving parts contained in the register reduces friction to a minimum. All registers read direct in kilowatt-hours. When necessary, however, a dial face multiplier of 10 or a multiple of 10 may be used.

Rotating Element and Bearings. The rotating element is an aluminum disk rigidly fastened to a vertical shaft by means of a die-cast hub. A worm is machined in the upper part of the shaft, which transmits the shaft motion to the register mechanism.

The lower bearing is of high grade selected sapphire, cupped and polished and mounted in a brass screw which is readily accessible for removing, permitting a close examination. No adjustment is required to replace this bearing when once removed.

The pivot used is standard for all watthour meters, and is made from a high grade hardened steel wire.

The top bearing is formed by a flexible steel wire mounted in a removable or adjustable brass plug. The wire extends down into a thin washer mounted in a recess in the top of the shaft.

Electrical Element. The magnetic circuit is in two sections, rigidly fastened together by two punched iron reinforcing plates. There are two current poles and one potential pole. The entire element is held in position inside the base by three screws, and is readily accessible. The removal of the back plate exposes the complete electrical element to view without any adjustments.

Finish. All meters are finished in dull black japan.

#### Damping Magnets and Full Load Adjustment.

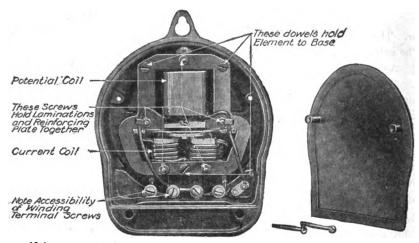
The permanent magnet, which regulates the speed of the disk, consists of two individual magnets mounted in a brass shoe, which is supported by a shelf on the main casting and clamped to it by two screws. The full load adjustment is obtained by means of a micrometer screw having right and left hand threads. One end of this screw threads into a boss on the main casting and the other into the magnet shoe projecting through the latter just below the jaws of the magnet. Turning the screw one way draws the magnets in and thereby decreases the speed of the disk, and vice versa.

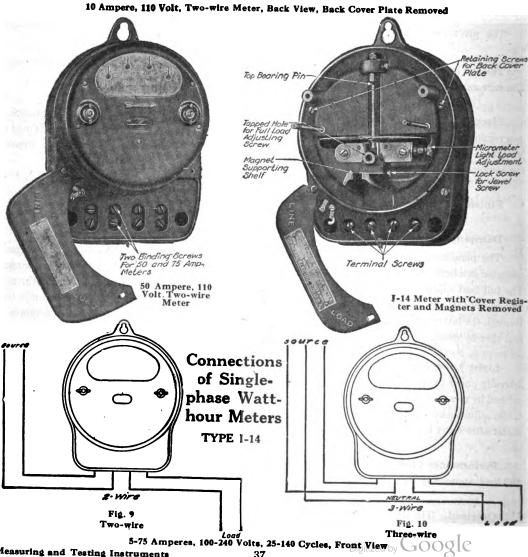
Light Load Adjustment. The light load adjustment is obtained by moving a metal punching laterally under the potential pole across the path of the potential flux. This lateral movement is accomplished by means of a knurled slotted thumbscrew at the right hand side facing the meter, giving micrometer adjustment. The plate is clamped to the base by two screws, which can be reached from the front of meter after cover is removed.

Performance Characteristics. The characteristic curve of the Type I-14 meter, between light and full load, approaches very nearly a straight line.

Overload. The series coils are very liberally rated, so that meters of from 5 to 25 ampere capacity will carry for any length of time 200 to 250 per cent. of their normal rating, without affecting their calibration. The larger meters can be operated safely on loads up to 50 per cent. above normal.

## Western Electric WATTHOUR METERS





#### Western Electric

#### WATTHOUR METERS (Continued)

Voltage. The Type I-14 meter is practically unaffected by variation in voltage of 10 per cent. above or below the marked voltage.

Frequency and Wave Form. The small changes in frequencies ordinarily experienced on light in circuits have practically no effect on the accuracy of the meter, nor does the difference in wave form of standard generators.

Temperature. Installations where meter will be subjected to wide variations in temperature should be avoided, but under ordinary conditions, meters are very little affected. All meters are adjusted at the factory for 20° C.

Power Factor. All I-14 meters are corrected for low power factor, so that variations in power factor have no appreciable effect on the accuracy of the meter.

Creeping. Two holes punched in the disk at diametrically opposite points eliminate creeping under all ordinary conditions.

Stray Fields and Short Circuits. The inherent design of the I-14 meter renders it capable of withstanding the effects of heavy short circuits without injury or impairment of accuracy.

### Single-phase Watthour Meters

TYPE I-14 Front Connected, Metal Cover, Dull Black Finish Self Contained

		<b>4</b> 0-	-133 Cycle	9				NT.4			
Amps.	110 V	ol <b>ts</b>	220 Volts			110 V	/olts	List No	List No.	List	Net Weight
ишро.	List No.	List Price	List No. List No. 2 Wire 3 Wire		List Price	List No.	List Price	2 Wire	3 Wire	Price	Lbs.
5	151942	\$16.25	151952	151962	\$18.25	152860	\$17.25	152870	152880	\$19.25	8.7
10	151943	19.00	151953	151963	21.00	152861	20.00	152871	152881	22.00	8.7
15	151944	21.50	151954	151964	<b>23</b> .50	152862	22.50	152872	152882	24.50	8.7
25	151945	26.00	151955	151965	<b>2</b> 8.50	<b>152863</b>	27.00	152873	152883	29.50	8.7
50	151946	35.50	151956	151966	<b>3</b> 8.50	152864	36.50	152874	152884	39.50	10.4
75	151947	41.00	151957	151967	44.00	152865		152875	152885	45.00	10.4
100	151948	45.00	151958	151968	48.00	152866	46.CO	152876	152886	49.00	14.75
150	151949	48.50	151959	151969	52.00	152867	49.50	152877	152887	53.00	14.75
*200	151950	50.00	151960		54.00	152868	51.00	152878		55.00	<b>16</b> .
*300	151951	51.00	151961	<b> </b>	55.00	152869	52.00	152879	l <i></i>	56.00	16.

<sup>\*</sup>Three wire not furnished in these sizes.

#### Meters for Use With Instrument Transformers

List No.	Amperes	Volts	Cycles	Wire	List Price Each
188640	5	110	25-30	<b>2</b>	\$22.00
188641	5	110	40-133	<b>2</b>	21.00
188642	5	220	<b>25</b> –30	2 and 3†	24.00
18 <b>8643</b>	5	220 .	40–133	2 and 3†	23.00
188644	5	220	<b>2</b> 5–30	3†	24.00
1886 <b>45</b>	. 5	220	40–133	3†	23.00

#### APPROXIMATE SHIPPING WEIGHTS IN POUNDS

	5 to 25		100 to 150	
·	Amperes	Amperes	Amperes	Amperes
Packed one in a box	15	17	32	35
Packed two in a box	27	30	65	67
Packed four in a box	. 44	55	95	
Packed eight in a box	84			

Delivery F. O. B. Factory, Lynn, Mass. For warehouse deliveries write nearest house.

#### IMPORTANT

Always specify the frequency of the circuit on which the meter is to be used.

All meters listed above may be used on circuits the voltage of which is not more than 10 above or below the rated voltage of the meter. When ordering meters for voltages outside of these limits the normal operating voltage must be specified.

All meters listed above under "Self Contained" require no transformers.

When the current to be metered exceeds the maximum listed above current transformers are necessary, or when the culties with the circuit is more than 600 both current and potential transformers are necessary. In such cases meters for use on the secondary of transformers should be ordered by List No. and rating as listed under "Meters for use with Transformers." These List Nos. cover the meter only and do not include transformers. Transformers should be ordered separately by List No. and rating.

†For 3-wire transformer rated circuits for use with double primary single secondary current transformers, the 2-wire meter List No. 188642 is used. For 3-wire 188644 is 188644 as 188644

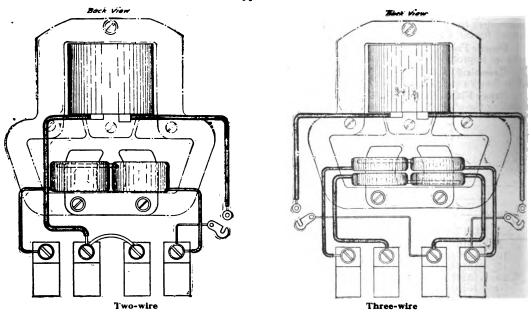
single primary current transformers, the 3-wire meter List No. 188644 or 188645 is used.)

## Western Electric

#### WATTHOUR METERS

## Connections of Single-phase Watthour Meters

Type I-14

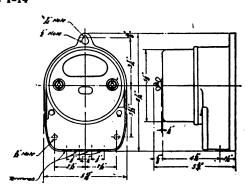


Internal connections-5 to 25 amp., 100 to 600 volts-all frequencies.

#### DIMENSIONS OF SINGLE-PHASE WATTHOUR METERS

Type I-14

5-25 Amperes, Two- and Three-wire

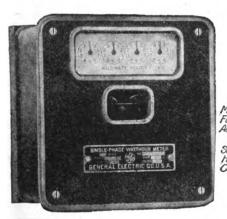


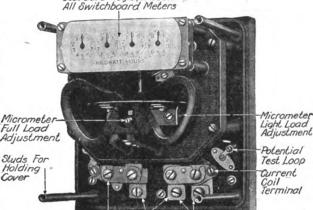
50-75 Amperes, Two- and Three-wire

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#### Western Electric

### Western Electric WATTHOUR METERS Switchboard Types

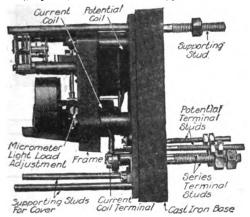




Standard Register Used On

Terminals Terminals for for Jumper Testing Instruments

#### Single-phase, Watthour Meter, Type IS-4



Side View of Meter, Cover Removed

#### Meter with Obver Removed

The Type IS-4 Switchboard Watthour Meter is a modification of the I-14, the difference being principally in the mechanical construction.

A cast iron base supports the frame, which carries all the component parts of the meter. It is supported and held to the board by three bolts, the lower ones being the terminal studs for the series winding.

Terminals. There are four terminal studs, two current and two potential. The terminals are so arranged that a test meter can be connected in series with the current coil, or the meter can be entirely isolated from the circuit and separate excitation provided, without interrupting the circuit or going back of the board.

Adjustments. The full load and light load adjustments are identical with those of the Type I-14 meter.

Cover and Finish. The cover is of cast iron and is finished in dull black and copper. The front surface of the cover is pebbled and the raised portions around the edge and openings are of polished copper.

Type IS-4

BACK CONNECTED, METAL COVER, DULL BLACK FINISH, SELF-CONTAINED

			25-133 Cycle	s Two-Wire			440 and
	110	Volts	220	Volts	440 Volts	550 Volts	550 Volts
Amperes	List No.	List Price	List No.	List Price	List No.	List No.	List Price
5	187698	<b>\$50.00</b>	187706	<b>\$52</b> .00	187714	187722	\$62.00
10	187699	53.00	187707	55.00	187715	187723	65.00
15	187700	<b>56.00</b>	187708	<b>58</b> .00	187716	187724	68. <b>00</b>
25	187701	60.00	187709	62.00	187717	187725	72.00
50	187702	68.00	187710	70.00	187718	187726	79.50
75	187703	72.50	187711	74.50	187719	187727	84.50
100	187704	75.50	187712	77.50	187720	187728	88.00
150	187705	79.00	187713	81.00	187721	187729	91.00
		METERS	FOR USE W	ITH TRANSF	FORMERS		
5	187730	<b>\$50.00</b>	187731	<b>\$52.00</b>	187732	187733	\$62.00

Always state frequency of circuit when ordering. Meters listed above may be used on circuits, the voltage of which is not more than 10 per cent. above or below the rated voltage of the meter. When ordering meters for voltages outside of these limits, the

normal operating voltage must be specified.

Meters listed above as Self-Contained Meters do not require transformers. When the currents to be metered exceed 150 amperes, current transformers are necessary. When the voltage of the circuit is more than 600 both current and potential transformers are necessary. In such cases meters for use on the secondthan 600 both current and potential transformers are necessary. In such cases meters for use on the secondary of transformers should be ordered, and should be designated by list number and rating as listed under "Meters For Use With Transformers." These list numbers cover the meter only and do not include Transformers should be ordered separately by list number and rating. transformers.

Packed Two in a Box 110 Lbs. Approximate Net Wt. 20 Lbs. Packed One in a Box 60 Lbs. Delivery F. O. B. Factory, Lynn, Mass. For warehouse deliveries write nearest house.

#### Western Electric WATTHOUR METERS

TYPE DS-6—POLYPHASE WATTHOUR METERS
FOR THREE-PHASE THREE-WIRE, TWO-PHASE THREE- AND FOUR-WIRE CIRCUITS 25-133 CYCLES
BACK CONNECTED, METAL COVER, DULL BLACK FINISH

	11	0 Volts			220 Volts		440	Volts	55	0 Volts	
Amperes	List No.	K.W. Capacity Non-Ind Loads Motor H.P. Rating 2 and 3 Phase	List Price	List No.	K.W. Capacity Non-Ind Loads Motor H.P. Rating 2 and 3 Phase	List Price	List No.	K.W. Capacity Non-Ind Loads Motor H.P. Rating 2 and 3 Phase	List No.	K.W. Capacity Non-Ind Loads Motor H.P. Rating 2 and 3 Phase	List Price 440 or 550 Volts
5 10 15 25 50 75 100 150	187734 187735 187736 187737 187738 187739 187740 187741	1 2 3 5 10 15 20 30	\$72.50 76.00 79.50 84.00 92.00 98.00 102.00 109.00	187742 187743 187744 187745 187746 187747 187748	2 4 6 10 20 30 40 60	\$79.50 83.50 86.50 92.00 101.00 106.50 111.00 116.50	187750 187751 187752 187753 187754 187755 187756 187757	4 8 12 20 40 60 80 120	187758 187759 187760 187761 187762 187763 187764 187765	5 10 15 25 50 75 100 150	\$89.50 93.00 96.50 101.00 110.00 116.00 120.50 126.00
			METERS	FOR USE	WITH I	NSTRUME	NT TRAN	SFORMER			
5	187766	1	\$72.50	187767	1 1	\$79.50	187768	1 11	187769	1 1	\$89.50

## Type DS-6 FOR FOUR-WIRE THREE-PHASE CIRCUITS ONLY 25-133 Cycles BACK CONNECTED, METAL COVER, DULL BLACK FINISH

	220	Volts Delta 127 Vo	lts Y	440 V	olts Delta, 254 Vo	lts Y
Amperes	List No.	K.W. Capacity Non-Inductive Load or or Motor H.P. Rating	List Price	List No.	K.W. Capacity Non-Inductive Load or Motor H.P. Rating	List Price
5 10* 15 25 50 75	188344 188345 188346 188347 188348 188349	2 4 6 10 20 30	\$79.50 83.50 86.50 92.00 101.00 106.50	188350 188351 188352 188353 188354 188355	4 8 12 20 40 60	\$89.50 93.00 96.50 101.00 110.00 116.00
	METERS F	OR USE WITH C	URRENT AND	POTENTIAL TE	RANSFORMERS	13700000
5	188358	190 Volts Delta	110 Volts Y			\$79.50
	METI	ERS FOR USE W	ITH CURRENT	TRANSFORME	RS ONLY	
5 5	188356 188357	220 Volts Delta 440 Volts Delta	127 Volts Y 254 Volts Y			\$79.50 89.50

## Direct Current Watthour Meters Types C-6 and C-7 FRONT CONNECTED, METAL COVER, JAPAN FINISH Type C-6

10	106 to 120 Volts			212 to 240 Volts, 3 Wire				Type C-6 212 to 240 Volts, 2 Wire				Type C-7 500 to 600 Volts, 2 Wire			
List No.	Amperes	List Price	List No.	Amperes	List Price	List No.	H.P. Capa- city	Am- peres	List Price	List No.	H.P. Capa-	Am-	List Price		
37594 37595 37596 37597 37598 37599 37600 37601 37602 37603	5 10 15 25 50 75 100 150 300 600	\$31.00 33.00 37.00 44.00 58.00 72.00 85.00 99.00 126.00 180.00	37604 37605 37606 37607 37608 37609 37610 37611 37612	5 10 15 25 50 75 100 150 300	\$35.00 40.00 47.00 54.00 71.00 79.00 94.00 121.00 166.00	37614 37615 37616 37617 37618 37619 37620 37621 37622 37623	13/4 2 31/4 7 15 20 25 40 80 160	5 10 15 25 50 75 100 150 300 600	\$35.00 40.00 47.00 54.00 68.50 74.00 87.00 112.00 144.00 200.00	37624 37625 37626 37627 37628 37629 37630 37631 37632 37633	2½ 5 7½ 15 30 50 60 100 200 400		\$45.00 52.00 60.00 70.00 85.00 100.00 145.00 190.00		

Note: Always state normal voltage of circuit when ordering.
Thomson direct current watthour meters, Types C-6 and C-7 will be furnished with moulded glass covers for an additional net price of \$1.00.

## Thomson Direct Current Prepayment Watthour Meters FRONT CONNECTED, METAL COVER, DULL BLACK FINISH Type CP-4

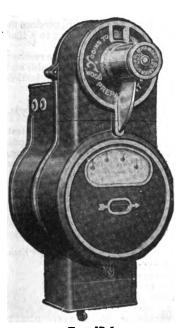
106	to 120 Volts,	, 2 Wire	212 t	o 240 Volts, 3	Wire	212 to 240 Volts, 2 Wire			
List No.	Amperes	List Price	List No.	Amperes	List Price	List Price	Amperes	List Price	
103236 103237 103238 103239	5 10 15 25	\$53.00 55.00 59.00 66.00	103240 103241 103242 103243	5 10 15 25	\$57.00 62.00 69.00 76.00	103244 103245 103246 103247	5 10 15 25	\$57.00 62.00 69.00 76.00	

Note: Always state normal voltage of circuit, and the rate of charge per kilowatt-hour for which the meter is to be adjusted. sted. Delivery F. O. B. Factory, Lynn, Mass. For warehouse deliveries write nearest tooler.

Type D-6
Polyphase Watthour Meter



Type D-6
Meter With Cover Removed



Type IP-5 Singlephase Prepayment Watthour Meter

#### Western Electric WATTHOUR METERS

Type D-6 For Three and Two-phase Circuits

25 to 133 Cycles
FRONT CONNECTED, METAL FINISH STATES

					E	ULL	BLAC	CK	FINISH			
			110	Vo	lts					220	/olts	
_	1	List	No.		Cap	W. acity Ind			List	No.	K.W. Capacity Non-Ind	
Amperes	3-Wi 3-Ph 3-Wi 2-Ph	ase ire	4-Wi 2-Ph		Loads or Motor H.P. Rating 2 and 3 Phase		List Price		3-Wire 3-Phase 3-Wire 2-Phase	4-Wire 2-Phase	Loads or Motor H.P. Rating 2 and 3 Phase	List Price
5 10	1722		1723 1723			1 2	\$56.0 58.0		172268 172269	172315 172316	2 4	\$62.00 64.00
15	1722	257	1723	309	i	2 3 5	60.0	٥١	172270	172317 172318	6 10	66.00 69.00
25	1723		172 172		Ι,	0	63.0 71.0		172271 172272	172318	20	78.00
50 75	1729 1729		172		1 3	5	78.0		172273	172320	30	85.00
100 150	172		172	313	۱ ۱	90	83.0		172274	172321	40	90.00
150	172	262	172			30	92.0	0	172275	172322	60	99.00
			4	40 \	Volts					550	Volts	
5	1 172	281	1 172		ī	4 8	\$76.0	ō	172294	172331	5	\$76.00
10	172		172		١.	8	78.0	ŭ	172295 172296	172332 172333	10 15	78.00 80.00
15 25 50 75	172		172			20	80.0 84.0		172296	172334	25	84.00
25	172 172		172		1 :	10	92.0		172298	172335	50	92.00
75	172		172			3ŏ	99.0		172299	172336	75	99.00
100 150	172		172	329		30	105.0		172300	172337	100	105.00
150	172		172			20 ,	112.0		172301	172338	150	1112.00
	ME	TER	SFC	R	USE	WIT	TH IN	ST	RUMEN'	T TRAN	SFORME	
Lis No		Am	percs	Vo	olts		.ist rice		List No.	Amperes	Volts	List Price
1886			5 5		10 20		6.00 2.00		188635 188636	5 5	440 550	\$76.00 76.00

	220 Volts Delta, 127 Volts Y			440 Volts	440 Volts Delta, 254 Volts Y		
Amperes	List No.	K.W. Capacity Non-Ind. Load or Motor H.P. Rating	List Price	List No.	K.W. Capacity Non-Ind. Load or Motor H.P. Rating	List Price	
5 10 15 25 50 75	172625 172626 172627 172628 172629 172630	2 4 6 10 20 30	\$62.00 64.00 66.00 69.00 78.00 85.00	172631 172632 172633 172634 172635 172636	4 8 12 20 40 60	\$76.00 78.00 80.00 84.00 92.00 99.00	

TYPE D-6 FOR FOUR-WIRE THREE-PHASE CIRCUITS ONLY

FOR USE WITH CURRENT AND POTENTIAL TRANSFORMERS

In the control of Amperes 5 188638 188639 254 440 76.00

Single-phase Prepayment Watthour Meters

The Type IP-5 Prepayment Meter contains the standard electrical element of the Type I-14 Meter with a prepayment mechanism. The crediting and switching mechnisms are mounted at the top of the meter and the coin box is a compartment at the bottom. The terminals are in a separately sealed compartment at the top, the line wires entering and leaving at the sides. The supporting screws are sealed. A back cover plate, similar to that in the standard I-14 Meter, closes the element chamber. A coin chute conducts the coin from the slot down through the meter chamber into a receptacle. Removing the meter cover provides access to the meter only and does not open the coin receptacle. The rate gearing is very simple and may be easily changed when it is desired to make a change in the rate of charge.

Quarter dollars are used in the device and advance payment can be made to the extent of twenty coins.

FRONT CONNECTED. METAL COVER. DILLI BLACK FINISES.

FRONT CONNECTED, METAL COVER, DULL BLACK FINISH

	TWO WIRE				THREE	WIRE
ţ	110 Volts		220 Volts		220 Volts	
	List	List	List	List	List	List
	No.	Price	No.	Price	No.	Price
5	192840	\$46.25	192844	\$48.25	192848	\$48.25
10	192841	49.00	192845	51.00	192849	51.00
15	192842	51.50	192846	53.50	192850	53.50

These meters may be used on circuits the voltage of which is not more than 10 per cent. above or below the rated voltage of the meter. When ordering meters for voltages outside of these limits, the normal operating voltage must be specified.

Always state frequency of the circuit and the rate of charge per kilowatt-hour for which the meter is to be adjusted. Delivery F. O. B. Factory, Lynn, Mass. For warehouse deliveries write nearest house. Measuring and Testing Instruments 42

## Western Electric NO. 1020 A TEST SET



No. 1020 A Test Set Assembled No. 1020 A Test Set DESCRIPTION OF NO. 1020 A TEST SET

The set consists of an exploring coil and a head telephone receiver, with the apparatus necessary for producing the interrupted current used in connection with the exploring coil. The apparatus for producing the interrupted current consists of an induction coil, a vibrator, an electro-magnetic interrupter, a condenser, a resistance, four standard dry cells, a two point switch and three binding posts. The apparatus is mounted in a wooden case, which includes a compartment for the exploring coil and receiver, and is provided with a carrying strap. USE OF NO. 1020 A TEST SET

The set is designed for correctly locating grounds, shorts, crosses, split pairs and wet spots in underground, block, building and aerial cables. It cannot be used to locate opens.

It must not be used in locating faults in loaded cables, as it is liable to magnetize the loading coils.

WIRING OF NO. 1020 A TEST SET

A diagram of the wiring is furnished on the inside of the cover of the case. PRINCIPLE OF OPERATION

The principle of operation is as follows: An interrupted current is passed over the conductor in trouble, through the fault, and back through another conductor or the cable sheath. The exploring coil, with the head telephone receiver connected in series with its windings, is then held close to the cable sheath. The interrupted current induces a current in the windings of the exploring coil, which, in turn, produces a tone in the receiver. The exploring coil is moved along the cable. When the fault is passed, the tone in the receiver will cease, or change in volume.

The design of the exploring coil is such that current flowing in the sheath of the cable will produce no

tone in the receiver. This eliminates any possibility of a false test, when locating grounds, due to a tone

being produced after the fault is passed.

The magnitude of the induction in the exploring coil and the consequent loudness of tone in the receiver.

The magnitude of the induction in the exploring coil and the consequent loudness of tone in the receiver. will depend upon the resistance of the fault, and upon the distance between the conductor in trouble and the sheath of the cable. If the conductor in trouble is located in the center of a large cable, the induction will not be as great as when the conductor is in the outer layer of wires, adjacent to the sheath.

For locating split pairs the low resistance winding is used.

Where the resistance of the fault is not known, the proper winding to use in locating grounds, wet spots,

shorts and crosses can be determined in the following manner:

Connect the conductor in trouble to either winding in the manner hereinafter described and then test for the tone with the exploring coil at some convenient point on the cable, noting the volume of the tone heard in the receiver. After this has been done, connect the conductor in trouble to the other winding, and note the volume of tone heard in the receiver, as in the first instance. The winding which gives the

greater volume of tone in the receiver is the proper one to use in locating the fault in question.

The exploring coil is provided with a set of terminals at each end. These terminals are terminated in jacks. Connection is made with the receiver by inserting a plug, attached to the receiver cord, in these jacks. For locating grounds and wet spots the plug is inserted in the end marked "Grounds"; when locating crosses, shorts and split pairs in the end marked "Shorts."

Size of case  $12 \times 6\frac{3}{8} \times 10\frac{1}{4}$  inches. Birch-mahogany finish.

No. 1020A

Use A tone testing set for use in locating shorts and grounds in cable. Interrupted current is sent over wires in trouble and the fault located by exploring coil and receiver.

Contains	List	Price	Each
1 No. 18AC Resistance			
1 No. 21K Condenser			
1 Induction Coil Vibrator Unit			
1 Electro-magnetic Interrupter			
1 Two-point Battery Switch			
1 No. 19A Test Set (exploring coil)			
1 Instruction Book			
1 No. 148W Receiver			
*4 Blue Bell dry cells		\$12	8.00
rdered. Digitized by GOOQ	e		00

\*Batteries not furnished unless ordered.

#### **ELECTRICAL TESTING INSTRUMENTS**



Government Standard Testing Set



Portable Plug Set

## Government Standard Testing Set

Government Standard Testing Set, made in strict accordance with the rigid requirements of the United States Navy Specifications 17-T-2. A high-grade type of "Plug-In" set.

Battery consists of 6 silver chloride cells.

Bridge values in the A and B arms, 1, 10, 100, 1000, and coils are accurate to 1/20 of 1 per cent. Rheostat on the decade plan, with 10 coils in each decade, of the values of units, tens, hundreds and thousands.

List	•	List Price
No.		Each
T-2070	Peerless G. S. decade portable testing set	\$200.00
T-2085	Carrying case of sole leather, with shoulder strap	18.00

## Peerless Portable Plug Set

Bridge coils in A arm of the values of 1, 10, 100, accurate to 1/20 of 1 per cent. Bridge coils in B arm of the values of 10, 100 and 1000, accurate to 1/20 of 1 per cent. Bridge arms reversible.

Rheostat coils are of units, tens, hundreds and thousands, and are of the multiples of 1, 2, 2, 5 of each denomination, a total of 11,000 ohms, and by using the 1 to 1000 ratio on the bridge, gives a range of 11 megohms in single ohm steps. Accuracy of the rheostat coils 1/10 of 1 per cent.

Provision for outside battery, in case higher E. M. F. is required than that furnished in the cells in the set.

This set is especially designed for ease in reading. The bridge is at the top, out of the way of the tester, and the plugs are in vertical columns, beginning with the thousands at the left hand side and followed by the hundreds, tens and units, so that when balance is obtained one reads the value of the resistance plugged out, the same as reading a column of figures.

The finish of this set is the same as the Peerless Switch Dial Set. Weight, 7½ pounds. Size, 8½ inches x 5½ inches x 6 inches.

List		List Price
No.	, .	Each
T-2010	Peerless plug type testing set	\$120.00
	Sole leather carrying case for T-2010	
T-2040	Folding tripod for supporting T-2010 in street	18.00

<sup>\*</sup>Delivery F. O. B. Factory, Philadelphia, Pa. For warehouse deliveries write nearest house.

#### **BATTERY METERS**







Eldredge Voltmeter



Advance Volt-ammeter

#### Pocket Voltmeters and Volt-ammeter

These instruments can be used on either primary or storage batteries. The case is heavily nickeled and the connecting posts have non-removable nuts.

List No.		List Price   Each	List No.		List Price Each
740.		Eacu	140.		Laco
322596	0 to 3 volts "Advance"	\$8.00	323018	0 to 25 volts "Advance"	\$11.20
322597	0 to 6 volts "Advance"	8.80	323019	0 to 30 volts "Advance"	11.20
322598	0 to 10 volts "Advance"	9.60	323020	0 to 3 volts "Eldredge"	6. <b>50</b>
323017	0 to 15 volts "Advance"	10.40	323021	0 to 8 volts, 0 to 30 amperes	
322599	0 to 20 volts "Advance"	10.40		"Advance"	11.20







Western Electric

## Pocket Meters

These meters have the smallest possible number of working parts and are therefore least liable to get out of order. The hand comes to an instant and positive stop without vibration, giving a quick reading and saving the battery. Will work in either direction of current.

List No.	Туре	Range	Diameter	List Price Each
1002	Ammeter	0 to 35 amps	2 ins.	\$2.00
1003	Volt-ammeter	0 to 35 amps.—0 to 11 volts	2 ins.	2.60
1005	Voltmeter	0 to 10 volts	2 ins.	$\frac{1}{2}.20$
1007	Coil tester	0 to 1.5 amps.	2 ins.	3.00
1008	Coil tester	$\int 0$ to 30 amps.		0.00
	and ammeter		Gaingle	3.40
Measuring an	d Testing Instruments	<b>87</b>	0	

#### TEST CLIPS







No. 2537



No. 2538

## Frankel's Test Clips

These clips are so designed that the teeth grip the wire while the pin pierces the insulation and makes a positive test connection, saving all stripping of wires and subsequent taping. Saves time and labor.

List		List Price
No.		Each
2521	The Standard Test Clip	\$0.70
2537	The Switchboard Test Clip	3.00
2538	The German Silver Test Clip	.70



No. 2533



No. 2534



No. 2530



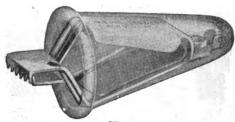
No. 2535

#### Frankel's Test Clips

List		List Price
No.	•	Each
2533	The Helpful Test Clip	
2534	The Reliable Test Clip	.70
2530	The Special Test Clip	
2535	The Efficient Test Clip	.90



15 Ampere Clip, Actual Size



20 Ampere Clip, Actual Size, Showing Rubber Insulator

## Universal Test Clips

Time savers in any electrical work requiring quick temporary connections. Made of copper, non-corrosive, may be used over and over again. Suggested for use with test sets, with voltmeters, on shop testing devices, by telephone linemen, as a helix clip, by meter departments, by railway signal inspectors, in college and commercial laboratories, on motor and transformer test floors, in motion picture projection work and in charging storage batteries. For storage battery work the lead-plated clips No. 13A or No. 11A should be specified.

List No.		List Price Each
8	Clip only, 15 ampere soldered connection, spread of jaws 11 in	. \$0.40
9	Clip with insulator, 15 ampere soldered connection, spread of jaws 11 in	
4	Insulator only for 15 ampere size	20
13	Clip only, 20 ampere, screw connection, spread of jaws $\frac{7}{8}$ in	40
13A	Clip only, 20 ampere, screw connection, spread of jaws 78 in. lead plated	40
14	Clip with insulator, 20 ampere, screw connection, spread of jaws 1/8 in	50
14A	Clip with insulator, 20 ampere, screw connection, spread of jaws 1/8 in., lead plated	50
15	Insulator only for 20 ampere size	
11	Clip only, 100 ampere, cleat connection, spread of jaws 1 in	. 1.50
11 A	Clip only, 100 ampere, cleat connection, spread of jaws 1 in., lead plated	1.50
12	Clip with insulator, 100 ampere, cleat connection, spread of jaws 1 in	1.70
7	Insulator only for 100 ampere size.	40
	Digitized by (TO)	-

#### CHAMPION SPARK PLUGS

Champion Spark Plugs are standard factory equipment on 4 out of every 5 automobiles, tractors and stationary gas engines le in America. And the owners of these motors, knowing Champion quality through actual service, prefer Champions when made in America. A replacing their plugs.



Special

1/2 in.

## Champion "X" THE FORD PLUG

The following is quoted from the Ford Manual in answer to No. 60:
"There is nothing to be gained by experimenting with different makes of plugs. The make of plugs with which Ford engines are equipped when they leave the factory are best adapted to the requirements of our motor."

Speci	al ½ Inch Type "X e each	**
Retail price	e each	\$0.75
List price	10 to 100	. 80
each	100 and over	80



## Champion HEAVY DUTY

Built for efficiency of the very highest type. The one piece construction makes leakage impossible. Standard factory equipment on the Briscoe, Abbott-Detroit, Jackson, King, Stearns - Knight, Scripps-Booth, Velie, Win-ton and a large number of tractors and trucks.

1/2 Inc	ch 1/8-18 He e each 10 to 100 100 and ov	avy Duty	
Retail pric	e each	\$	1.00
List price	10 to 100	· · · · · · · ·	.94
each	ioo and ov	er	. 90
	$\sim$ 1	•	

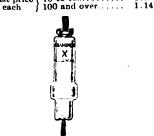


## Champion ONE PIECE HEAVY STONE

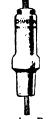
Specially made for cars of high power and com-pression. Extra heavy material throughout Absolutely tight.

Regular factory equipment on such cars as Mo-line Knight, Owen Mag-netic, Overland "Six." Pathfinder, Peerless, Wil-lys-Knight, White

16	Inch	7/4-18 On	e Piece	Heavy
		Stor	10	
Tie	t price	ce each	)	1.20



## Champion X Retail price each.....\$0.40 List price \ 10 to 100.....60 each \ 100 and over...54



## Champion Regular



### Champion REGULAR

A most reliable plug. Sturdy in construction, patented Cup Gasket Assembly, making compression leakage impossible. Adopted as Standard factory equipment on Maxwell, Lambert, Luverne, Regal and other well known cars.

\$1,00 .94 .90
<b>●1.</b> 00
. 94
. 90



## Champion BUICK

#### FOR BUICK CARS

The Champion Regular 7-18 long plug is specially made for the Buick car. Has long shell, conical porcelain Buick terminal.

The long shell allows the spark to ignite within the cylinder instead of in a pocket, as occurs when the ordinary type plug is used.

<b>-</b> 7	≨-18 Long Buick	
Retail pric	e each	\$1.00
List price	10 to 100	. 94
each	e each	. 90



½ in.

## Champion

#### TWO PIECE HEAVY STONE

A highly efficient plug for such cars as Chalmers, Cadillac, Chandler, Franklin, Hudson, Locomobile, Mitchell. Oldsmobile. Packard and Pierce-Arrow

	<b>78-19</b>			
16	Inch	18 Two	Piece	Heav
		Stone		

Retail price	e each	\$1.25
List price }	e each	1.20 1.14



## Champion Heavy Stone



#### Champion "O" THE OVERLAND PLUG

Specially built for use in Overland car. Adopted as factory equip-

Numerous testimonials from car ewners prove it to be the one dependable plug for the Overland under all conditions, giv-

Special ing maximum power and efficiency.

Specia	al ⅓ Inch Type "O	••
Retail price	e each	\$1.00
List price \	10 to 100	.94
each }	100 and over	. 20



## Champion CONICAL **PLUG**

Adopted by the Stude-baker Corporation as standard factory equip-ment on all Studebaker care.

Also standard equipment on Allen, Hollier, Elco, Dixie Flyer, Elgin, Grant and others.

1:	2 Inch 1/8-18 Conica	1
Retail pric	e each	\$1.00
List price	10 to 100	. 94
each )	100 and over	. 90



½ in. ¾-18

ing and closing.
Brings the gasoline right at the sparking point.

PLUG

Will start any motor any time on the first

quarter turn.

1/2 Inch 1/8-18 Priming Plug 



Champion Conical

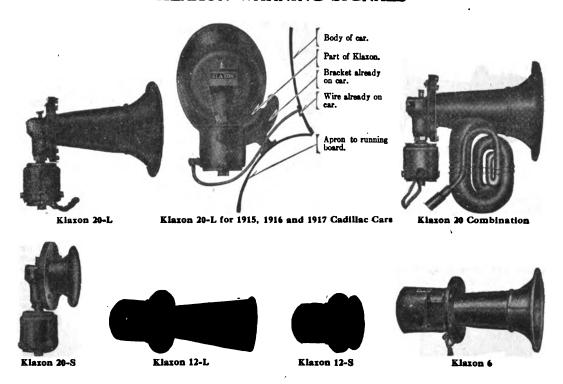
CHAMPION PORCELAINS

and over...

Delivery F. O. B. Factory, Toledo, O. For warehouse deliveries write nearest house.

Digitized by Automobile and Ignition Supplies

### KLAXON WARNING SIGNALS



#### Electric Klaxons

#### FOR AUTOMOBILES

Klaxon warning signals are known everywhere. They are universally recognized as standard. Their success is due to the fact that they have never been built to sell at a price. Klaxon price has always been secondary to Klaxon goodness. Klaxon cost is measured in years—not dollars. Every Klaxon is guaranteed to give satisfaction—permanently.

The Klaxon note is produced by a vanadium steel diaphragm set in rapid vibration by a toothed wheel. In the electric Klaxons this wheel is driven by a finely constructed electric motor, in the hand-operated Klaxons, by a train of gears set in motion by a push rod. This principle of operation is entirely different from that employed in the so-called "buzzer" or "electric" horns.

Electric Klaxons are ordinarily wound to operate on 6 to 8 volts—supplied either by dry cells or storage battery. All instruments are dust and water-proof.

#### THE KLAXON 20-L

The Klaxon 20-L has always been and will always be the highest grade signal made. No other signal even looks like it. You see it on all the best cars. Klaxon 20-L with special bracket for Cadillac. May be attached to the same bracket and with the same screws that hold the horn that came with the car.

In ordering specify "Cadillac" Klaxons. The bracket is a part of the instrument. It does not come separate.

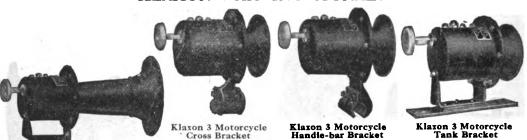
#### THE KLAXON 12

Designed for those who want the powerful Klaxon note in a low-priced instrument. It is for installation outside or under the hood. Mechanically, it has all the Klaxon features and is just as high grade in construction. The Klaxon 12-S is the signal of this type for outside use.

#### THE KLAXON 6

The Klaxon 6 is smallest of the electric Klaxons. It is the only high-grade motor-driven signal selling at a low price. The signal for small cars that carry batteries. May be installed either outside or under the hood.

#### KLAXON WARNING SIGNALS



Klazon 3

#### Hand-operated Klaxons

	Retail Price	List Price	l R	letail Price	List Price
Type	Each	Each		Each	Each
Klaxon, 20-L	. \$20.00	\$30.00	Klaxon 12-S (finish black only)	<b>\$</b> 12.00	<b>\$1</b> 8.00
Klaxon, 20-S	. 20.00	30.00	Klaxon 6 (finish black only)	6.00	9.00
Klaxon, 20 combination	. 30.00	45.00	Klaxon 3	3.00	4.50
Klaxon 12-L (finish black only	) 12.00	18.00	Klaxon 3, side bracket (for trucks)	3.00	4.50

## Klaxon 3 for Motorcycles

Each Each \$4.50 Klaxon 3 Motorcycle, finish standard Klaxon black, B & N, black and brass . . . . . \$3.00 Three types of brackets are furnished for attaching to motorcycle: (1) For attaching to top bar of frame. (2) To center of handle-bar. (3) To top of tank. No. 1 furnished unless otherwise specified.



Alaxon 20 Deck



Klaxon 6 Deck



List Price

Retail Price

Industrial Klazon WS

Klaxon Warn	ing Signals	for Boats	Retail Price	List Price
Model Klaxon 20 Deck (with swivel base)			Each \$22.50	Each \$36.00
Klaxon 6 Deck (with swivel base)			7.50	12.00

#### Industrial Klaxons

Installation. Klaxons are usually installed on circuits in multiple. Special instruments can be furnished for series operation on power circuits if desired at no additional charge. (Specify on order.) Maximum line voltage drop allowable is 5 per cent.

Industrial Klaxons conform to the requirements of the National Board of Fire Underwriters. They

are enameled standard fire red, have special brackets and are fitted with screw terminals.

The Klaxon 20 Deck and the Klaxon 6 Deck are furnished with fittings for marine use. The U.S.

Department of Commerce has approved all Klaxons for marine purposes. They are being used extensively in the navy. Marine Deck Klaxons are fitted with a special bracket with a swivel base that may be screwed

to the deck and permits the instruments to be turned in any direction and removed for stowing.

The Wor weatherproof instruments are a new design. They are for outdoor use and all connections are enclosed. The bottoms of the instruments are bell-tipped, for conduit, and the instruments are absolutely weatherproof. Standard windings are for 6 volts D.C. Additional charge is made for windings above 21

volts.				
Up to 21 volts incl No charge	50 to 59 volts incl \$2.50	80 to 8	39 volts incl.	\$4.00
22 to 29 volts incl \$1.00	60 to 69 volts incl 3.00		99 volts incl.	
30 to 39 volts incl 1.50	70 to 79 volts incl 3.50	100 to 11	10 volts incl.	5.00
40 to 49 volts incl 2.00				
The Klaxon 20 can be wound for	voltages up to and including 120.		Retail Price	List Price
Type			Each	Each
Industrial Klaxon, Type S (short proj	ector)		<b>\$</b> 20.00	<b>\$</b> 30.00
Industrial Klaxon, Type L (long proje	ctor)		. 20.00	30.00
Industrial Klaxon, Type W (weatherp	roof model)		. 20.00	30.00

30.00 30.00 22.5022.50

Automobiles and Ignition Supplies

## **EVEREADY STORAGE BATTERIES**



## Automobile Starting Types

						Ba	tterv Ca	pacity (r	er Singl	e Full Ch	arge)	Momen-	<u> </u>
List No.	Volts	Wt. Lbs.	Outside	Dimensi	ons, Ins.	Ampe	re Hours	Con-	Hou Burn	irs Continging With	uous Total	Starting Rate— Ampere	List Price
			Long	Wide	High	3 Amp. Rate		10Amp. Rate	18 C.P.	30 C.P.	60 C.P.	Dis- charge	Each
68-60R 68-60H	6	48	{ 93/8 93/8	7 1 5 18	8 8 8 103 8	81	70	60	27	14	6	200	\$43.50
68-80R	6	56	10 1	7-14	8761	105	95	80	35	19	8	250	48.00
68-80H 6H8-80R	6	58	1 10 12	5 7 18	1032 }	10	95	80	. 35	19	8	250	48.00
6HS-80RL 6S-80RL	6	56	\ 20 1/8 20 1/8	41/4 41/4 71/4	93% } 87%	105	95	80	35	19	8	250	48.00
6GD-808	6	63	93/8	74	111/3	120	105	90	s 40	, 21	و ہوا	290	57.00
68-100R 68-100H	6	63	$\begin{cases} 12 \\ 12 \end{cases}$	5 18	1038	126	110	100	يِّے 42 م	يِّ 22 يو	<b>2</b> 10	300	54.00
68-120R 68-120H	6	72	145/8 145/8	7 15 5 18	878 1038	160	140	120	Qi 53	gi 28	ਜ਼ੇ 12	350	60.00
6G D-120S	6	74	∫12	7 -}k	111/2 \	175	150	130	₩ 58	.0 30	≥ 13	380	63.00
6GD-120SE 6S-140R	6	80	111/	81/2 7 /4	111/2 { 87/4 {		l		ŀ		-		66.00
68-140H 68-160R	6 6		15 1	7 18 5 18 7 18 5 18	1038 }	180	160	140	60	32	14	400	67.50
6S-160H	6	86	17 ½ 17 ½	5 %	10%}	19	185	160	65	37	16	450	75.00
6S-160HE 12835R	1 12	85	181/4	373	1034	195	185	160	65	37	16	450	75.00
128-35H	12	64	$\left\{\begin{array}{c} 12\frac{3}{8} \\ 12\frac{3}{8} \end{array}\right\}$	7 1 5 1/8	1038	42	35	25	37	18.5	7	100	58.50
12-S50R 128-50H	12 12	77	{ 15 15	7 1	1036	6U	30	40	R 23	을 26.5	ຸ 10	150	67.50
12S-60R 12S-60H	12 12	94	175% 175%	7 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1	1034	81	70	60		35.5	₹ 14	200	78.00
128-80R	12	108	2014	5 1/8 5 1/8	8781	10	95	80	Amp.	46.5	i 19	250	85.50
128-80H 128-100R	12 12	122	\\ \begin{pmatrix} 20\frac{1}{4} \\ 23 \end{pmatrix}	5 1/8 7 1/4	103% { 87% {				\Q1	\\$1	1 '	l	1
128-100H 12S-35RF	12 12		} 23 123/8	7 16 5 8 7 1	103% { 87% {	126	110	100	=`112	ลิ 55.5	ະລີ 22	300	93.00
128-35HF	12	64	123%	7 1	10% [	42	35	25	37	18.5	7	100	58.50
128-50RF 128-50HF	12 12	77	15 15	5 1/8	1038	60	50	40	<sub>e</sub> 53	26.5	e 10	150	67.50
128-60RF 128-60HF	12 12	94	3 17 5/8	7 🕁	87€\	81	70	60	₽ 62	₹ 35.5	2 14	200	78.00
12S-80RF	12	108	} 175% 2014	5 1/8 7 1/8 5 1/8 5 1/8	1038 { 878 {	105	95	80	∯ 93	1 46.5	19		1
12S-80HF 12S-100RF	12 12		2014	5 7 á 7 4	1038	1				<b>*</b>	0	250	85.50
12S-100HF	12	122	{ 23	51/2	1036	126	110	100	°°112	55.5	7 25	300	93.00
16S-35R 16S-35H	16 16	83	161/8 161/8	5 1/8	1038	42	35	25	월 53	₽ 28	§ 10.5	100	75.00
168-50R 168-50H	16 16	102	195% 195%	7 15 5 18	878 1036	60	50	40	A. Rate 29	¥ 35	된 15	150	85.50
16S-60R	16	123	1231/	7 15 5 %	87∕a\	81	70	60	× 89	₹ 50	₹ 20.5	200	96.00
168-60H 168-35RF	16		161/8	5 ½ 7 Å	103% /		!	1	<u> </u>	<del>!</del>	<del></del>	200	80.00
168-35HF 168-50RF	16	83	1612	7 1 5 1/8	1034	42	35	25	R 23	± 28	월 10.5	100	75.00
168-50HF	16 16	102	1195%	5 1/3	10 1/8	60	50	40	₹ 76	₹ 35	₩ 15	150	85.50
168-60RF 168-60HF	16 16	123	23 1/8 23 1/8	7 1 5 7 1 5	878	81	70	60	₹ 89	€ 50	₹ 20.5	200	96.00
188-35R	18	90	1201/2	634	8741	42	35	25	o 65	9 34	S 12	100	00.50
188-35H 188-50R	18 18		155% 203%	632 818	1036	į.		ŀ	1 4	2	2	100	82. <b>5</b> 0
188-50H 188-60R	18 18	112	15%	81 i	1038	60	50	40	A 80	₹ 42	₹ 17	150	93.76
188-60H	18	140	2012 1574	95%	1036	81	70	60	-105	₹ 58	≈ 23.5	200	105.00
248-20R 248-20H	24 24	93	{ 1934 1934	7 15 5 %	103%	25	20	13	Rate	मूँ 27	हु 13 ·	75	84.76
248-20RL 248-20HL	24 24	94	∫ 13 <del>{ }</del>	10%	87/81	25	20	13	관 관 49	₹ 27	≄ 13	75	84.76
248-35R	24	127	10% 251%	95/8 7 <del>18</del>	103% }	42	35	25	₩ 90	₹ 46.5	3 18.5	√100.	100.50

Delivery F. O. B. Factory, Long Island City, N. Y. For warehouse deliveries write nearest house.

## **EVEREADY STORAGE BATTERIES**







Ignition Type

## Automobile Lighting Type

6 VOLT

	1	Bat	tery Car	pacity (pe		Outside			5 11				
	Amp	ere Hour Discha	s, Contin	nuous	Hours Continuous Burning with Total Lamp Load of				Dimensions Ins.				17
List No.	,	3	5	10	6 C.P.	18 C.P.	30 C.P.	60 C.P.				Wt.	List
No.	Ampere Dis- charge Rate		Ampere Dis- charge Rate			3 Ampere Dis- charge Rate	5 Ampere Dis- charge Rate	10 Ampere Dis- charge Rate	Length	Width	Height	Lbs.	Price Each
6L-40R 6L-40H- }	70	50	40		70	17	8		634	716 578	87/8 }	30	\$27.76
6L-50R 6L-50H	90	60	50	40	90	20	10	4	81/8	7 18 578	878	38	33.76
6L-60R 6L-60H	110	81	70	60	110	27	14	6	938	7 16 57/8	878 1038	43 •	34.50
6L-80R 6L-80H	130	111	90	.80	130	37	18	8	10 11	718 578	878	53	40.50
6L-100R	150	125	110	100	150	42	22	10	12	7 16 578	878 1038	60	46.50
6L-120R 6L-120H	180	150	135	120	180	50	27	12	145/8	7 18 51/8	878 1038	71	52.50

## Ignition Types

This type of battery is made especially for gas engine ignition and for use with Magneto Dual Starting Systems.

#### FURNISHED IN WOODEN BOXES WITH INTERIOR RUBBER JARS

List			e Hour	Wt.	Ot	YES		
No.	Volts	5 Ampere Discharge Rate	1 Ampere Discharge Rate	Lbs.	Length	Width	Height	Price
4IG-60 6IG-40 6IG-60 6IG-80 8IG-60	6 6 6 8	35 20 35 45 35	60 40 60 80 60	14 16 26 30 32	4 11 4 13 5 14 6 11	7 15 7 15 7 16 7 16 7 16	874 874 874 874 874	\$18.00 21.00 24.00 27.78 80.00

The difference between the IG and V Type Ignition Batteries lies only in the method of assembly, the capacities being equal. Instead of a one-piece compartment jar as used in the V Type, the IG contains individual jars incased in wooden box, similar to construction of the regular Lighting and Starting Types, including "feet construction" of the plates, not used in V Type batteries.

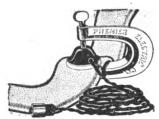
On account of difference in dimensions, be sure to specify whether IG or V type should be supplied. Delivery F. O. B. Factory, Long Island City, N. Y. For warehouse deliveries write nearest house.

11/2

#### **ELECTRIC VULCANIZERS**



emier Vulcanizer and Complete Outfit Furnished with Each Vulcanizer



#### Premier Automatic Electric Vulcanizer

An absolutely safe and entirely automatic portable vulcanizer, designed to operate from storage battery,

An absolutely safe and entirely automatic portable vulcanizer, designed to operate from storage battery, or 110 volt lighting circuit. Simply connect to the battery or lighting circuit and press the button.

Cost of operation is practically negligible; where battery charge costs 35 cents, the cost of an average repair is 2 cents. On 110 volt circuits the cost of a repair is about 1/4 of a cent.

No watching or timing required. No danger of fire or explosion. Shuts off current automatically when job is finished. Small current consumption.

Light and compact—easily carried in tool box. Economical—saves time—convenient.

Complete outfit, consisting of vulcanizer with flexible connecting cord, repair gum, cement, "Peco" tire tool, seissors, durable chain and complete book of directions.

Retail \$3.50 | List \$5.96

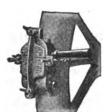
Specify voltage when ordering.

It's-It Vulcanizer

Furnished complete with clamp, heating unit, flexible cord and plug. Made in 6 and 12 volt. 6 volt Retail Price List Price standard. It's-It Vulcanizer, complete..... \$1.50



Safety Vul-Kit No. 32



Ford Kit



Tube Kit



Ford Tube Kit

Safety Vul-Kit Complete for Casings and Tubes

Ford Kits

For Ford Casings and Tubes

Does same work on tubes and casings as the Vul-Kit but is designed to fit 3 and 3½ inch Ford tires. Heats with gasoline or alcohol. No exposed flame.

5 lbs.

List \$3.58

Tube Kit

For All Sized Tubes
Repairs all sized tubes by same simple safe method as Vul-Kit. It cures clear through making permanent repairs of any desired size. Type F, No. 31 Complete with repair material.................Retail \$2.00

4 lbs. List \$2.60

Ford Tube Kit

For Ford Tubes
Ford tube vulcanizer operating on same principle as the Tube-Kit. Cannot overcure or undercure, yet cures clear through any sized repair. 

#### PACKARD AUTOMOBILE CABLES For High and Low Tension Ignition

Packard Cable is constructed so as to withstand the continuous presence of heat, grease and oils. These are the arch-enemies of rubber in all forms. These cables are hermetically sealed from every deteriorating influence.



Combination High Tension Cable

This cable is suitable for all forms of severe high tension service. Color is Packard brown with double red striping.

Combination High Tension Magneto Cable

This cable is designed for magnetos with small terminal. Color is Packard brown with double red striping.



Plain High Tension Cable

This cable has four (4) layers highest grade rubber. Made for those who desire a plain, unprotected cable. Color, natural rubber gray.

Combination Low Tension Cable, 1-Strand
This cable is standard for all kinds of low tension service. Color is Packard brown with double red striping.



Combination Low Tension Cable 2-Strand

This cable is round in form and is particularly adapted to single and two cylinder engines. Replaces two single cables. Colors of conductors are red and black; completed cable is Packard brown with double red striping.

Combination Low Tension Cable, 3-Strand

This is an excellent cable for two cylinder engines; also for wiring a double set of batteries. Made with filler so as to be round in form. Colors of conductors are red, black, green; completed cable is Packard brown with double red striping.

For Electric Lighting and Starting Systems

While good ignition cable is important and necessary to the successful working of any car, yet the wiring of electric lighting and starting systems is even more important. The reasons are as follows: 1st. The cables are concealed and in inaccessible places. 2d. They are subjected to more abrasion and vibration. 3d. They are exposed to more dust, water and mud. 4th. Possible damage to storage batteries. 5th. Danger by fire due to short-circuits.

Parkard Lighting Cables are moderated.

Packard Lighting Cables are made after the general style and of the same construction that characterises Packard Ignition Cables. Each single conductor is protected by a double braid and the usual Packard finish. These single conductors are then stranded and made round in cross-sections by filling material. The assembly is then covered by a double braid of characteristic brown with double red striping and finished in the usual manner. These cables are as small in diameter as is consistent with absolute reliability.



Combination Lighting Cable No. 14, 1-Strand
This cable is recommended for wiring tail-lamps. Color is Packard brown, with double red striping.

Combination Lighting Cable No. 14, 2-Strand

This is a round form cable and is recommended for wiring tail-lamps. Color of conductors is red and black. Completed cable is Packard brown with double red striping.

Combination Lighting Cable No. 12, 1-Strand

This cable is recommended for wiring side and head-lamps. Color is Packard brown with double red striping.



Combination Lighting Cable No. 12, 2-Strand

This cable is recommended for wiring side and head-lamps. Made with filler so as to be round form. It is a popular style and size. Color of conductors is red and black. Completed cable is Packard brown with double red striping.

Combination Lighting Cable No. 10, 1-Strand

This cable is recommended for wiring from generator to battery and from battery to switches. Also for wiring large head lamps. Color is Packard brown with double red striping.

Combination Lighting Cable No. 10, 2-Strand

This is a round form cable and is recommended for wiring from generator to battery and from battery to switches. Also used to wire head-lamps which are of large size. Color of conductors is red and black. Completed cable is Packard brown with double red striping.

Prices on application.

#### **CUTLER HAMMER BATTERY SWITCHES**

For Automobile Lighting



No. 7160 or 7170 With Plate No. 7161



No. 7172 With No. 7162 Gang Flush Plate



No. 7184 Switch With No. 7185 Plate





No. 7171 With Plate No. 7161

Push and Pull Battery Switches

List No.	Switches Without Plates	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Retail Price Each	List Price Each
7160	Single, 10 amperes, 80 volts	20	100	20	\$0.56	\$1.00
7172	2 Gang, horizontal, 10 amperes, 80 volts	10	50	20	1.12	1.82
7173	3 Gang, horizontal, 10 amperes, 80 volts	6	30	20	1.68	3.03
7174	4 Gang, horizontal, 10 amperes, 80 volts	5	25	20	2.24	4.04
7184	2 Gang, tandem, 10 amperes, 80 volts	10	50	20	1.12	1.82
7186	3 Gang, tandem, 10 amperes, 80 volts	6	30	20	1.68	3.03
7188	4 Gang, tandem, 10 amperes, 80 volts	5	25	20	2.24	4.04
7191	Single 3 wire switch, 10 amperes, 80 volts	20	100	20	.64	1.15
7192	2 Gang, 3 wire switch, 10 amperes, 80 volts	10	- 50	20	1.28	2.30
7193	3 Gang, 3 wire switch, 10 amperes, 80 volts	6	30	18	1.92	3.40
7170	Single, 3 way switch, 10 amperes, 80 volts	20	100	20	1.00	1.80
7177	Series parallel switch, 10 amperes, 80 volts	10	50	20	1.40	2.53
7180	Momentary contact switch, 10 amperes, 80 volts.	20	100	20	.45	.81
7198	Plug ignition switch, 10 amperes, 80 volts	20	100	20./	.64	1.15
7171	Plug switch for grounding magneto, 10 amperes,			,		
	80 volts	20	100	20	.64	1.15

Standard package discounts allowed on an assortment (in unbroken cartons) equivalent to 100 single switches. Standard finishes: Polished brass, brush brass, polished nickel, gun metal. Specify finish desired.

## Struck Up Switch Plate

List No.	Description	Dimensions Height Width	Std. Pkg.	Retail Price Each	List Price Each
7161	For one switch, in one horizontal row,	$2\frac{2}{32} \times \frac{15}{16}$ in. $2\frac{2}{32} \times 1\frac{3}{4}$ ins.	100 50	\$0.12 .24	\$0.22 .43
7162 7163	For three switches, in one horizontal row	$2\frac{1}{2} \times 2\frac{1}{2}$ ins.	30	.36	. 65
7164 7178	For four switches, in one horizontal row	$2\frac{1}{12} \times 3\frac{1}{4}$ ins. $2\frac{1}{2} \times 2\frac{1}{2}$ ins.	25 50	.48	.87 .65
7179	Special plate for No. 7177 and one additional	$3\frac{1}{4} \times 2\frac{2}{12}$ ins.	30	.48	.87

Standard finishes: Polished brass, brush brass, polished nickel, gun metal. Specify finish desired.

#### Solid Switch Plates (Tandem)

	For two switches, in one vertical row	35/8 x	15 in.		\$0.24	
7187	For three switches, in one vertical row	$5\frac{3}{16}$ x	🙀 in.	30	.36	
7189	For four switches, in one vertical row	65/8 x	}} in.	25	.48	. <b>87</b>

Standard package discount allowed on assortment of plates aggregating holes for 100 switches. Standard finishes: Polished brass, brush brass, polished nickel, gun metal. Specify finish desired.



No. 7195 Door Switch

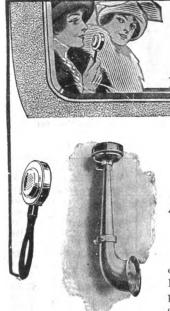
FOR AUTOMOBILE DOOR With finished brass plate 2 16 inches high and 15 inch wide, and with round striking plate 1 inch in diameter.

Door Switch

List No.	Description	Carton Quantity	Std. Pkg.	Retail Price Each	List Price Each
7195	10 amperes, 80 volts	20	100	\$1.00	\$1.80
7196		20	100	1.08	1.95

Standard finishes: Black oxidized. Dull black or polished nickel furnished as specified.

## Western Electric CHAU-PHONE



## 16-4-7

Chau-phone (Chauffeur Telephone)

## A Telephone for Limousines or other closed automobiles

The Western Electric Chau-phone is a telephone equipment for automobiles of the Limousine and Landaulet type for communicating between the passengers and the chauffeur, and takes the place of the old fashioned and unsanitary speaking tube.



Trans-

Receiver

#### **APPARATUS**

The apparatus consists of a transmitter mounted on a handle and a weatherproof loud speaking receiver fitted to a magaphone horn which can be mounted on the framework of the car near the chauffeur's ear. (The receiver is so designed that it is adjustable to cars having either right or left hand drive.) The standard finish is black.

#### **OPERATION**

Orders spoken into the transmitter in an ordinary conversational tone are delivered to the chauffeur with the tone magnified—loud and clear—above the wind and the street noises, regardless of the speed at which the car is traveling. This eliminates trouble encountered with a speaking tube, as with the latter it is frequently necessary for the chauffeur to slow down the car or drive up to the curb in order to hear the spoken instructions, especially in windy or stormy weather.

#### INSTALLATION

The Chau-phete can be installed as readily on old as on new cars and the wires can be concealed. The regular car batter s—6 or 8 volts—will operate it, and the current required is so small as to be negligible, no current being: quired while not in use.

#### **PACKING**

Each Chau-phone is put up in a substantial box containing wire and everything else necessary to install it, including illustrated directions.

Method of Packing

Chau-phones are used by a large number of leading car and body builders.

•	East of th	e Rockies	West of the Rock		
	Retail -	List	Retail	List	
Code	Price	Price	Price	Price	
1384A	\$28.00	<b>\$44</b> .00	\$29.40	\$46.20	
1384B	37.00	<b>56</b> .50	38.85	60.40	

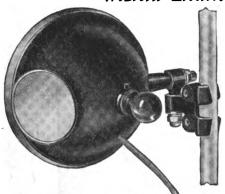
In connection with the above, a cord reel can be furnished to take up the cord of the Chau-phone transmitter. This cord reel is known as No. 1A.

Code

1384B Same as 1384A but includes a No. 1A cord reel.

The Chau-phone Completes the Luxury of the Closed Car.

#### Western Electric VICTOR SPOT LIGHTS







No. 50 Showing Front View

Western Electric Victor Spot Light

For safe driving, for convenience in reading road signs and street numbers, and for a dependable trouble light, every automobile should be equipped with a Western Electric Victor Spot Light. This spet light clamps on the windshield or may be fitted with a bracket for attaching to the foredoor. It is always within easy reach of the driver and can be tilted to any angle or position for reading signs along the road, or for gauging the width of the road when passing other cars.

When used as a trouble lamp it is only necessary to remove one nut and lift the spot light from its

bracket.

Each spot light is equipped with a 21 C.P. nitrogen filled bulb, which throws a powerful beam far in advance of the car at a small expenditure of current from the battery. The bulb used is 6 volt double contact unless otherwise specified. The double contact lamp is recommended in all cases where the spot light

is occasionally to be used as a trouble lamp.

Mirror Attachment. One of the chief advantages of the new No. 50 Western Electric Victor Spot Light is the mirror which is mounted on the back of the lamp and furnishes the driver with a clear view of the road in back of the car during the day. The value of a mirror on an automobile is so well recognized to-day that in many States laws have been passed which compel the majority of car owners to equip their cars with mirrors. The use of the Western Electric Victor Spot Light not only assures the car owner a maximum of safety at night, but, by means of the mirror attachment, during the day as well.

Each

Each

Each

Western Electric Victor Spot Light with mirror attachment.

\$6.00



No. 330943 Electric Spot Lamp Windshield Attachment



No. 181 Fore-door Electric Spot Lamp

Western Electric Victor Spot Light

These lamps are finished in all black except door and hexagon nuts on brackets which are furnished in either brass or nickel finish.

Twenty-one C.P. nitrogen bulbs are used. They are shipped with 6 volt double contact unless otherwise specified. Throws 37,500 C.P. light.

List Price
Each
330943 Electric spot lamp, diameter of lamp 6½ ins., with windshield attachment. \$5.00 \$8.00

181 Electric spot lamp, diameter of lamp 6½ ins., with fore-door attachment. 5.00 Delivery F. O. B. Factory, Cincinnati, O. For warehouse deliveries write nearest house.

8.00

## DRY BATTERIES

For Intermittent Service



Blue Label Regular



Blue Label Combination Screw Top



Blue Label Straight Screw Top

#### Blue Bell Cells BLUE LABEL

This battery is particularly recommended for telephone transmitter work, to meet the needs of a reliable, highly efficient and long-lived cell. It is furnished in three styles of tops: standard binding post top, combination screw top and binding post and straight screw top. The two latter types are for use in Patterson Battery Sets.

Davoci	ocus.						
List	*Sizes of		Wt per	Std.	Std. Pkg.	List	Price
No.	Zinc Cans	Description	Cell	Pkg.	Lbs.		Per Bbl.‡
340383†	$2\frac{1}{2} \times 6$ ins.	Standard binding post top	2 lbs.	125	300 lbs.	<b>\$</b> 0.70	<b>\$</b> 60.00
340384	$2\frac{1}{2} \times 6$ ins.	Combination screw top and binding post	2 lbs.	125	300 lbs.	.78	70.00
340385	$2\frac{1}{2} \times 6$ ins.	Screw top, (no binding posts)	2 lbs.	125	300 lbs.	.76	67.50



Red Label Regular Round Carton



Red Label Regular Square Carton



Red Label Combination



Straight Screw Top

## Red Label Blue Bell Cells

RED LABEL

This cell is designed for a wide range of service; it is a general purpose battery that may be successfully used for all classes of intermittent service, such as door bell annunciators, railway train dispatching, ignition, etc. The two latter types are for use in Patterson Battery Sets.

List	Sizes of		Wt. per	Std.	Std. Pkg.	List	Price-
No.	Zinc Cans	Description	Cell	Pkg.	Lbs.	Each	Per Bbl.
340386	$2\frac{1}{2} \times 6$ ins.	Standard binding post top (round carton)	2 lbs.	125	300 lbs.	<b>\$</b> 0.70	<b>\$</b> 62.50
340380	$2\frac{1}{2} \times 6$ ins.	Standard binding post (square carton)	2 lbs.	125	300 lbs.	.70	62.50
340387		Combination screw top and binding post	2 lbs.	125	300 lbs.	.78	<b>72.50</b>
340388	$2\frac{1}{2} \times 6$ ins.	Screw top (no binding posts)	2 lbs.	125	300 lbs.	.76	70.00
* A	dd 1 inch to th	a haight of calls having extended carbon of	nog and	1/2 inch	for other	styles of	connec-

ld 1 inch to the height of cells having extended carbon plugs, and  $\frac{1}{2}$  inch for other style tion.

Note: Fahnestock clips will be furnished when specified without extra charge. Delivery F. O. B. Cleveland, Cincinnati, Brooklyn and New York. For warehouse deliveries write est house. nearest house.

#### DRY BATTERIES

For Intermittent Service



Rectangular



Duplex Battery



## Columbia Cells RECTANGULAR TYPES

List	Over-all Dimensions	Weight	Weight Lbs.	Std. Pkg.	Std. Pkg.	List Price
No.	*Not Including Connections	per Čell	per 100 Packed	Bbl.	Wt.	Each
R-1	1 x $1\frac{1}{2}$ x $3\frac{1}{4}$ ins.	.7 oz.	55	400	<b>210</b>	<b>\$</b> 0.60
R-2	1 x $1\sqrt[3]{4}$ x $3\sqrt[4]{4}$ ins.	$8\frac{1}{4}$ oz.	62	400	230	.60
R-3	$1\frac{1}{4} \times 1\frac{1}{2} \times 3\frac{1}{4}$ ins.	$8\frac{1}{4}$ oz.	62	400	230	.60
R-5	$1\frac{1}{4} \times 2\frac{1}{4} \times 4$ ins.	$14\frac{1}{2}$ oz.	115	300	<b>295</b>	.70
R-6	$1\frac{3}{8} \times 1\frac{3}{4} \times 4\frac{1}{8}$ ins.	$12\frac{3}{4}$ oz.	100	300	265	.70
R-7	$1\frac{1}{2} \times 2 \times 4\frac{3}{4}$ ins.	1 lb. 3 oz.	145	250	290	.70
R-8	$1\frac{5}{8} \times 2\frac{1}{2} \times 4\frac{7}{8}$ ins.	1 lb. 10 oz.	197	200	350	.80
R-10	$1\frac{3}{4} \times 2\frac{1}{4} \times 5\frac{3}{8}$ ins.	13/4 lbs.	207	150	450	.80
'R-11	$2 \times 216 \times 6$ ins.	$2\frac{1}{2}$ lbs.	288	125	340	.90
R-12	$2\frac{1}{4} \times 2\frac{3}{4} \times 6\frac{1}{2}$ ins.	$3\frac{1}{2}$ lbs.	390	100	375	1.10
R-347	$3 \times 4 \times 7$ ins.	$6\frac{7}{8}$ lbs.	754	50	370	3.00
Duplex	$6\frac{3}{4} \times 5\frac{1}{8} \times 2\frac{5}{8}$ ins.	4∮ lbs.	480	<b>5</b> 0	240	1.40
	2/: 1 4 1 1 1 1 4 6 - 4 4 1 1 - 1	والمسامين أنساسا				

\*Add 34 inch to height for total height to include connections,
Types R-11 to R-347 will be furnished with Fahnestock connectors when so ordered.

#### OVAL TYPE

List	Size of	Weight	Weight Lbs.	List Price
No.	Zinc Cans	per Čell	per 100 Packed	Each
0-4	$1\frac{1}{4} \times 2\frac{1}{4} \times 4$ ins.	11½ oz.	80	<b>\$</b> 0.60





IGNITO

CENERAL IGNITIO





Rapid Fire



Red Seal



Eveready

	REGULAR TYPES									
	List	Size of			Wt. per	Std.	Std. Pkg.	t†List	Price-	
	No.	Zinc Cans	Descripti	on	Cell	Pkg.	Lbs.	Each	per Bbl.	
	6	$2\frac{1}{2} \times 6$ ins.	Columbia Re	ed <b>Label</b>	2 lbs.	$12\overline{5}$	300	<b>\$</b> 0.60	\$60.00	
	6	$2\frac{1}{2} \times 6$ ins.	Columbia Ig	nito <del>r</del>	2 lbs.	125	300	.70	62.50	
	8	$3\frac{1}{2} \times 8$ ins.	Columbia Ro	ed Label	5 lbs.	50	315	1.40	62.50	
	8	$3\frac{1}{2} \times 8$ ins.	Columbia Ig	nito <b>r</b>	5 lbs.	50	315	1.60	67.50	
Miscellaneous Cells										
	340413	$2\frac{1}{2} \times 6$ ins.	1900	Regular	2 lbs.	125	300	\$0.70	\$60.00	
	340414	$2\frac{1}{2} \times 6$ ins.	Rapid Fire	Ignition	2 lbs.	125	300	.70	62.50	
	340416	$2\frac{1}{2} \times 6$ ins.	Red Seal	Regular	2 lbs.	125	300	.70	<b>60</b> .00	
	340584	$2\frac{1}{2}$ x 6 ins.	Hi-up	Ignition	2 lbs.	125	300	.70	<b>62</b> .50	
	340418	$2\frac{1}{2}$ x 6 ins.	Eveready	Ignition	2 lbs.	125	300	00.70	62.50	
	†Del	livery F. O. B. Cle	veland. ††De	livery F. O.	B. Clevela	nd. Cincin	nati, Brookl	vn and Nev	v York.	

Batteries and Accessories

#### COLUMBIA "HOT SHOT" IGNITION BATTERY



"Hot Shot" Battery

## Columbia "Hot Shot" Battery

The Columbia "Hot Shot" is a unit battery containing from three to ten specially made cells connected in combinations to meet all requirements from 4½ volts to 9 volts.

The battery is designed especially for automobile ignition, for electric horns, for motor boat and gas engine ignition, for operating carriage electric lamps, for mine signals, for household service, and for electric toys—in fact, for every place where a reliable dry battery is needed.

The containing case is weatherproofed fiber paper. The top is sealed with hard sealing-wax. Brass binding posts and cord handles are provided, which makes the outfit easy to carry. The type number designates the number of cells and method of connecting them.

The first figure designates the number of sets of cells and if more than one, these sets are connected in multiple; the second number, the number of cells in series; the third number, the size of the cells, and the last number shows whether cells are arranged in one or two rows. Number 2462 means two sets of cells in multiple, four cells in series in each set, and number 6 cells, two rows.

List					Weight	Std.	Std. Pkg.	Price
No.	Voltage	Length	Width	Height	Lbs. Each	Pkg.	Wgt. Lbs.	Each
1361	$4\frac{1}{2}$	8	$2\frac{3}{4}$	71/2	7	35	315	<b>\$</b> 1.98
1461	6	105/8	$2\frac{3}{4}$	71/2	9	25	290	2.64
1462	6	53/8	$5\frac{3}{8}$	71/2	9	25	290	2.64
2261	3	105/8	23/4	71/2	9	25	290	2.64
†1561-S	71/2	$12\frac{3}{4}$	23/4	71/4	11	20	284	2.64
2262	3	53/8	53/8	71/2	9	25	290	3.30
1561	71/2	131/4	23/4	71/2	11	20	284	3.60
1562	71/2	8	5	71/2	11	20	274	3.30
1661	9	15	$2\frac{3}{4}$	71/2	13	17	290	3.96
1662	9	8	$5\frac{3}{8}$	71/2	13	17	290	3.96
2361	41/2	153/4	23/4	71/2	13	17	290	3.96
236 <b>2</b>	41/2	8	53/8	71/2	13	17	290	3.96
2462	6	· 105/8	53/8	$7\frac{1}{2}$	18	12	<b>280</b> .	5.28
4262	3	105/8	53/8	71/2	18	12	280	5.28
<b>2562</b>	71/2	131/4	53/8	71/2	22	9	<b>2</b> 56	6.60
5262	3	131/4	$5\frac{3}{8}$	71/2	22	9	256	6.60
2662	9	153/4	53/8	71/2	••	7	235	7.92
2663	9	105/8	81/8	$7\frac{1}{2}$	••	7	235	7.92
3402	6	$15\frac{3}{4}$	53/8	71/2	••	7	235	7.92
3463	6	105/8	81/8	71/2	• •	7	235	7.92
+1/4.0	da aanaaia11	for Charma						

†Made especially for Stearns car.

Delivery F. O. B. Factory, Cleveland, Ohio. For warehouse deliveries write nearest house.

#### COLUMBIA MULTIPLE BATTERIES



Multiple Battery

Multiple Batteries

The Columbia Multiple Battery is a unit proposition. Only two connections have to be made. Inside the hermetically sealed box the cells are separated by wooden pieces and then are held in place and entirely covered by a solid, waterproof insulating compound, which absolutely prevents any motion of the separate cells. The connections are not temporarily made to the binding posts by light wires, but are permanently soldered copper strip, so that the resistance between each pair of cells is practically nothing.

This battery represents the latest developments in primary battery manufacture and combines maximum efficiency and reliability with simplicity. Its uses can be classified under three heads: (a) Motor

Ignition, (b) Lighting, (c) Miscellaneous.

(a) Motor Ignition. On automobiles, trucks, motor boats, launches, gas, gasoline, etc. (b) Lighting. On automobiles, such lights as tail, side, limousine, etc., and for exploration or trouble lamps on extension cord. On power boats, for running lights and the lights used in lockers or cabins, etc. (c) Miscellaneous. Under this division may be listed a number of uses. Among them are mine signals,

blasting equipments, transmitter circuits of telephone train dispatching systems, vibrating and massage machines, electric horns and sirens.

How to Select It. If you know the voltage for which your apparatus was built, you can figure the proper battery by the following rule: To obtain the approximate voltage of a multiple battery, multiply the second digit in its number by 1½. Example: 356 Multiple Battery.  $5 \times 1½ = 6½$  volts. It is therefore evident that a 356 should be used on 6 volt equipment.

In General. Where 3 dry cells are used in series, get Type 536 Columbia Multiple Battery. Where 4 dry cells are used in series, get Type 356 Columbia Multiple Battery. Where 6 dry cells are used in series, get Type 266 Columbia Multiple Battery.

How to Connect. Place the battery in the position it is to occupy in service.

Screpe the ends of

How to Connect. Place the battery in the position it is to occupy in service. Scrape the ends of the wires clean and bright, connect to the binding posts and screw the cap down tight.

List Prices and Data METAL CASE, MULTIPLE BATTERIES

				TIGIRE	M & or Ting.	11100
List 1	No. Voltage	Length	Width	Over All	Each	Each
146	6	11	3	83/4	16	\$2.88
226	3	11	3	837	16	2.88
246	6	7 11	51/2	83%	$\tilde{25}$	5.76
426	š	ii	$51\frac{1}{2}$	237	25	5.76
346	· <b>6</b>	ii		03/	37	
436			8½ 81/8	0%		8.64
	41/2	11	81/8	8%	37	8.64
266	9	11	81/8	81/8	<b>37</b>	8.64
156	71/2	133/4	3	8¾	17	<b>3.</b> 60
256	71/2	13¾	$5\frac{1}{2}$	8¾	34	7.20
256 526	3	1334	51/2	83/4	34	7.20
356	71/2	13 3 7	81/2	83/	50	10.80
536	41/2	1337	Ří%	837	50	10.80
166	9 2	812	512	83%	20	4.32
326	3	<b>9</b> 12	512	937		4.32
020	417	078	0 / 2 E 1 /	074	20	4.04
236	41/2	81/8	MULTIPLEX	8¾ BATTERIES	20	4.32
		WOOD CASE,	MULTIPLEX	BATTERIES		
146	6	115%	33/8	8	14	<b>\$2</b> .88
226	3	115%	33/8	8	14	2.88
246	6	115%	61%	8	22	5.76
426	3	115%	81%		22	5.76
346	ĕ	115%	Q52	8 8 8 8	31	8.64
436	412	115%	952	ě	31	8.64
266	41/2	2 %	8%	0		
200	9.,	11%	8%8	ð	31	8.64
156	71/2.	141/4	33/8	8	16	3.60
256	71/2	141/4	<b>6⅓</b>	8	28	<b>7</b> .20
526	3,	141/4	<b>6⅓</b>	8	28	7.20
<b>35</b> 6	71/2	141/4	85/8	8	44	10.80
<b>536</b>	41/2	14 1/4	85%	8	44	10.80
166	ġ´*	85%	61%	Ř.	. 18	4.32
236	41/2	85%	61/8	Ř	18	4.32
326	2/3	8 <sup>5</sup> /8		Q _	Cisogle	4.32
	Delivery F O P F-		6½ For morehous	o dolinorios		T.U2
	Delivery F. O. B. Fa	cwry, Cieveland, O	. For warehous	se deliveries, Wri	o nearest nouse.	

Wgt. Lbs.

Price



Model B-4

Skeleton Strip Type



Model A-4 Solid Hard Rubber Strip Type

## Series Strip Types—Models A and B

Models A and B Strip Type Patterson Battery Sets are the simplest and lowest price outfits made. Strip Type Outfits are used in large quantity, but admittedly are not as desirable as steel box and steel cabinet outfits, for up-to-date battery installations should be enclosed.

Strip Type Outfits are regularly furnished with strap hinges, so that the same may be conveniently mounted on a side wall; by removing hinges they may be mounted solid on ceiling or on under side of a shelf. Strip Type Outfits have automatic bridges in receptacles, which permit renewal of battery without

opening of circuit or interrupting service during the operation.

Circuit wires after once being connected to terminals of the holder never have to be disconnected or reconnected.

Loose connections and broken wires are absolutely impossible.

Contacts are positive and of ample carrying capacity.

Installation or renewal of battery is foolproof; no technical knowledge is required, for batteries when screwed into the receptacles automatically make all connections.

Model B Strip Type Outfits are sectional, so that at any time an additional unit or units may be inserted, if at any time a higher voltage outfit is desired.

Model A Strip Type Outfits are similar to Model B, but are not sectional; they are made of solid hard

rubber in place of skeleton type like the Model B.
In both Model A and B Patterson Battery Sets screw cups are renewable, so in case of injury to a cup a new cup can be readily inserted at the expense of a few cents.

If Strip Type Sets are ordered for multiple work it should be so specified at the time of ordering, so that automatic bridging device may be omitted, as automatic bridges are not desirable for multiple work. A and B Holders are regularly made in all sizes from 2 cell up to 12 cell. Larger sizes to order at

proportionate advance. Strip Type Patterson Battery Sets are packed in individual corrugated cartons, neatly labeled, for

	) Type ratterson battery sets are packed in individual corrugated ca	irons, nearly	iabeled, for
shelf stoo			
List	MODEL B STRIP TYPE, SKELETON	Size,	Price Each,
No.	No. Cells Capacity	Inches	No Batteries
B-2	2 in row	$8\frac{1}{2} \times 3 \times 2$	\$4.08
B-3	3 in row	$11\frac{1}{2} \times 3 \times 2$	6.12
B-4		$14\frac{1}{2} \times 3 \times 2$	8.16
BS-4	4 in 2 rows of 2		8.16
B-5		$17\frac{1}{2} \times 3 \times 2$	10.20
B-6	6 in row	$20\frac{1}{2} \times 3 \times 2$	12.24
BS-6	6 in 2 rows of 3	$11\frac{1}{2} \times 6 \times 2$	12.24
B-8	8 in row	$26\frac{1}{2} \times 3 \times 2$	16.32
BS-8	8 in 2 rows of 4	$14\frac{1}{2} \times 6 \times 2$	16.32
	Sectional Units	. •	
BM	Middle section battery holder unit	<b></b> .	\$2.04
BZ	Zinc terminal end section		
BC	Carbon terminal end section		2.04
	MODEL A STRIP TYPE, SOLID HARD RUBBER	<b>t</b>	
A-2	2 in row	$8\frac{1}{2} \times 3 \times 2$	\$7.34
A-3		$11\frac{1}{2} \times 3 \times 2$	11.02
A-4	4 in row		14.68
AS-4	4 in 2 rows of 2	$8\frac{1}{2} \times 6 \times 2$	14.68
A-5	5 in row	$17\frac{1}{2} \times 3 \times 2$	18.36
A-6		2014 x 3 x 2	22.04
AS-6	6 in 2 rows of 3	11½ x 6 x 2	22.04

No battery cells are included in the above prices; Patterson-Columbia Cells extra. Delivery F. O. B. New York City. For warehouse deliveries write nearest house.

\*List Price

### PATTERSON BATTERY SETS

#### SERIES STEEL BOX TYPE-MODEL BB



Model BB-4. Open
Front Dropped, Top Raised to Screw
in Cells.

Model BB outfits consist of the standard Model B series type strip, mounted in a pressed steel case, finished in black japan, with substantial padlock and two keys. These outfits are suitable for all installation where the current requirements are not so heavy as to make desirable the use of the multiple service outfits.

Model BB outfits have self-locking cases in addition to the padlock, the front automatically locking under the top flange when pushed up into position.

Stationary binding post terminals for circuit wires are mounted on backboard of box; on same base are mounted the knife switch jaws with which copper blades, carried by holders, make contact when cells are screwed into holder, automatically dropping into place. Insulated bushings are set in back for introduction of circuit wires. Metal cleats hold box ½ inch from wall, giving ample space for running of circuit wires.

BB battery sets are regularly made in all sizes from 2 cell up to 12 cell; special sizes to order.

							Each
List	Battery	Operative	Initial Amp.	Oı	utside Dimensi	ions——	Without
No.	Holder No.	Voltage	Capacity	Height	Width	Depth	Batteries
BB-2	B-2	2	25	8 ins.	10½ ins.	$6\frac{1}{2}$ ins.	\$8.16
BB-3	B-3	3	<b>25</b>	8 ins.	$13\frac{1}{2}$ ins.	$6\frac{1}{2}$ ins.	10.60
BB-4	B-4	4	25	8 ins.	$16\frac{1}{2}$ ins.	$6\frac{1}{2}$ ins.	13.06
BB-5	B-5	5	25	8 ins.	$19\frac{1}{2}$ ins.	$6\frac{1}{2}$ ins.	15.92
BB-6	B-6	6	25	8 ins.	$22\frac{1}{2}$ ins.	$6\frac{1}{2}$ ins	18.76
BB-8	B-8	8	25	8 ins.	$28\frac{1}{2}$ ins.	$6\frac{1}{2}$ ins.	24.20
BB-10	B-10	10	25	8 ins.	$34\frac{1}{2}$ ins.	$6\frac{1}{2}$ ins.	<b>2</b> 9.64
BB-12	B-12	12	25	8 ins.	$40\frac{1}{2}$ ins.	6½ ins.	<b>35.0</b> 8

#### SERIES SIDE WALL TYPE-MODEL BR



Model BR-4.

Model BR outfits are designed for side wall installations. They consist of a standard Model B series type strip with the addition of a metal faced backboard on which stationary binding post terminals for circuit wires are mounted. On the same base are mounted the knife switch jaws with which copper blades, carried by holders, make contact when cells are screwed in, and holder is dropped into place.

Automatic bridge in each cell receptacle permits the removal of one or more cells from the set without opening the circuit, and also provides a quick test for a weak cell without ammeter.

Model BR battery holders are regularly made in all sizes from 2 cell up to 12 cell; special sizes to order.

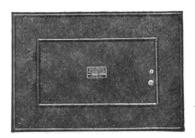
If a "split-up" of either of the above battery sets is desired, provision can be made for this if specified in advance. For every "split" 3 inches extra width is required. For example, 3 cells may be required for "talking" circuit of an interior telephone system, 6 cells for "ringing" circuit or for annunciators, bells, etc., or a total of 9 cells in the battery set. When so specified, this or any "split-circuit" arrangement can be furnished.

List	Battery	Operative	Initial Amp.	<u> </u>	outside Dimen	sions——	*List Price
No.	Holder No.	Voltage	Capacity	Height	Width	Depth	Each
BR-2	B-2	2	25	6 ins.	$8\frac{1}{2}$ ins.	3¾ ins.	\$6.12
BR-3	B-3	3	25	6 ins.	$11\frac{1}{2}$ ins.	$3\frac{3}{4}$ ins.	8.30
BR-4	B-4	4	25	6 ins.	$14\frac{1}{2}$ ins.	$3\frac{3}{4}$ ins.	10.48
BR-5	B-5	5	25	6 ins.	$17\frac{1}{2}$ ins.	$3\frac{3}{4}$ ins.	12.78
BR-6	B-6	6	25	6 ins.	$20\frac{1}{2}$ ins.	$3\frac{3}{4}$ ins.	14.96
BR-8	B-8	8	25	6 ins.	$26\frac{1}{2}$ ins.	$3\frac{3}{4}$ ins.	19.32
BR-10	B-10	10	25	6 ins.	$32\frac{1}{2}$ ins.	$3\frac{3}{4}$ ins.	<b>23</b> .66
BR-12	B-12	12	25	6 ins.	38½ ins.	$3\frac{3}{4}$ ins.	28.02

No battery cells are included in above prices. Patterson Columbia Cells, extra.

Solid hard rubber Model A strips in place of skeleton will be furnished, when ordered, at an advance of \$1.80 list per cell-unit.

\*Delivery F. O. B. New York City. For warehouse deliveries write nearest house.



Model BSC-6
Flush Steel Cabinet, Door Closed



Flush Steel Cabinet, Door Open

# Flush and Surface Wall Cabinet Types—Oak and Steel

#### MODEL BSC-SINGLE SERIES

Model BSC outfits are the best series sets made. They differ from Model BB in having regular cabinet casings, either flush or surface, as desired, equipped with cylinder lock.

Where the current requirements are not heavy enough to make necessary the multiple service outfits, the Model BSC series sets will be found most satisfactory.

Model BSC flush sets are particularly recommended for new installations, for the advantage of a flush setting cabinet can hardly be overestimated.

Model BSC battery sets are made in all sizes from 3 cell up to 12 cell.

If a "split-up" of the Battery Set is desired, provision can be made for this if specified in advance. For every "split" three inches extra width is required. For example, 3 cells may be required for "talking" circuit of an interior telephone system, 5 cells for "ringing" circuit or for annunciators, bells, etc., or a total of 8 cells in the Battery Set. When so specified, this or any "split-circuit" arrangement can be furnished.

Standard finish is black enamel for steel sets, dull rubbed varnish for oak sets.

Dimensions given below are "over-all" dimensions of boxes; dimensions of trim in flush steel sets are always 3 inches greater than dimensions of box— $1\frac{1}{2}$  inches on each side; dimensions of trim in flush oak sets are always 5 inches greater than dimensions of box— $2\frac{1}{2}$  inches on each side. Depth of box in flush sets only  $3\frac{5}{6}$  inches.

#### List Prices and Data

			Amp.		Approx. Siz	:0		-*List Pric	e Each-	
List	No. of Bat.	Operative	Initial	Ov	er All, Inc	hes	Flush	Surface	Flush	Surface
No.	in Row	Voltage	Capacity	Height	Width	Depth	Steel	Steel	Oak	Oak
BSC-3	3	3	<b>25</b>	131/2	143/4	35/8	\$20.24	\$16.86	<b>\$</b> 36.72	<b>\$3</b> 0.60
BSC- 4	4	4	25	131/2	173/4	35/8	24.16	20.12	42.10	35.08
BSC- 5	5	5	25	131/2	203/4	35/8	28.24	23.52	47.82	39.84
BSC- <b>6</b>	6	6	25	131/2	233/4	35/8	<b>32.48</b>	27.06	53.86	44.88
BSC-8	8	8	25	131/2	293/4	35/8	41.12	<b>34.28</b>	66.58	<b>55.48</b>
BSC-10	10	10	25	$13\frac{1}{2}$	353/4	35/8	49.94	41.62	<b>73</b> .92	61.60
BSC-12	12	12	25	$13\frac{1}{2}$	413/4	$3\frac{5}{8}$	<b>59.74</b>	49.78	86.66	72.22

In ordering always specify whether surface steel, surface oak, flush steel or flush oak is desired.

Drop-front doors are regularly furnished on extra wide sets.

If double doors are wanted on extra wide sets add 15% to above list prices.

All cabinets are furnished with substantial cylinder locks and two keys.

Standard finish of wood is quartered oak, hand rubbed; of steel, black enamel rubbed dull.

No battery cells included in above prices. Patterson-Columbia Cartridge Cells extra.

\*Delivery F. O. B. New York City. For warehouse deliveries write nearest house.



BSC-6+20 Series Battery Set

### For No. 1801 Switchboards

#### SYSTEMS A, B, C AND D

Patterson Battery Sets designed to meet the requirements of the 1801 Switchboard make the best possible battery installation for this type of telephone switchboard.

The 1801 Switchboard requires two (2) separate batteries for its operation and yet, with a Patterson Battery Set, a new battery can never be installed wrong by the most inexperienced person.

The following advantages admittedly necessary for the important service a Battery Set is called upon to supply for an 1801 Switchboard are:

1801 Switchboard are:

1. Installation or renewal of battery foolproof; no technical knowledge required to handle the same, for batteries in the cabinet automatically make connections when screwed into the receptacles.

2. Circuit wires never have to be disconnected or reconnected once outfit is installed.

3. Loose connections and broken wires absolutely impossible.

4. Individual cells in outfits may be tested with ammeter without removing cells.

5. Positive contacts of ample carrying capacity.

6. Separate protection fuses on both sets of batteries in cabinet.

7. In Series Outfits, automatic bridges in receptacles permit renewal of battery without opening the circuit or interrupting service during the operation.

8. Service life of Series Outfits 25 per cent. to 40 per cent. greater than possible with old style battery equipment; life from Multiple-Service Outfits 4 to 6 times greater than possible with old style battery equipment.

Patterson Battery Sets for 1801 Switchboards cost a few dollars more than the old style battery installation with its tangled mass of wires, but completely do away with unnecessary maintenance expense and in a short time will save their entire cost.

Patterson Battery Sets for 1801 Switchboards are made in two (2) types, viz.:

Series Outfit BSC-6+20

Series Outfit BSC-6+20

Multiple Outfit BMC-28+220

Multiple Outfit BMC-28+220

Series Type Patterson Battery Sets for No. 1801 Switchboards are furnished with two separate batteries in one cabinet:

One Battery Consisting of six dry cells connected in series for TALKING System A System B \*System C

On	e Battery
Consisting of twenty dry	cells connected in series for and RINGING
LINE LAMPS	and RINGING
System A	System A
System B	System B
System C	System C
System D	#
‡A hand generator or	interrupter is used for ringing in

†If the outgoing trunks are to a magneto exchange, two dry cells should be added to the talking battery.

System D. Particular attention is called to the advantage of Multiple Outfits in which two sets of 6 Screwtop Blue Bell Cells are provided for talking and two sets of 20 Screwtop Blue Bell Cells are provided for line lamps and ringing; these Multiple Outfits will give four to six times the service-life that the old style binding post battery installations gave.

				List Price	No Batteries-	
List	Туре	Total Cell	Non Flush	Flush	Non Flush	Flush
No.		Capacity	Oak Case	Oak Case	Steel Case	Steel Case
		SERI	ES BATTERY S	ETS		
BSC- 6+20	Series	26	\$119.82	\$145.58	\$112.20	\$136.44
BSC- 8+20	Series	28	124.32	150.08	116.68	140.92
		MULTIPLE-	SERVICE BATT	ERY SETS		
BMC-26+220	Multiple	52	\$211.84	\$257.78	\$220.64	\$268.36
BMC-28+220	Multiple	56	220.80	266.76	222.80	276.34

Dimensions given above are over all dimensions of boxes; dimensions of trim in flush steel sets are always 3 inches greater than dimensions of box—1½ inches on each side; dimensions of trim in flush oak sets are always 5 inches greater than dimensions of box—2½ inches on each side. Depth of box in flush sets only 3½ inches.

Double doors will be regularly furnished in all oak cabinets. If double doors are wanted on extra wide steel sets, add 15 per cent. to above list prices; drop-front doors will be regularly furnished on extra wide steel sets.

No battery cells are included in above prices. Screwtop Blue Bell Cells extra.

All cabinets are furnished with substantial cylinder locks and two keys.

Standard finish of wood is quartered oak, hand rubbed; of steel, black enamel.

Special Cabinets will be made to order at slight advance over regular prices shown above.

Solid hard-rubber Model "A" strips in place of skeleton will be furnished in above battery sets when so ordered, at an advance \$1.80 list per cell unit.

"Delivery F. O. B., New York City. For warehouse deliveries write nearest house.

# Surface and Flush-Steel and Oak

#### MULTIPLE-SERVICE WALL CABINET TYPES-MODEL BMC

From 3 Volts, 50 Amperes to 12 Volts, 150 Amperes

#### **3 VOLT CABINETS**

No.   Cells   Voltage   city   Voltage   city   Height   Width   Depth   Surface   Flush   Surface										
No. Capacity Voltage city Height Width Depth Surface Flush Surface Flush Surface Flush BMC-23 2 rows of 3 3 50 21 15 41/4 \$51.40 \$61.68 \$46.92 \$56.30 \$31.82 \$38.18 BMC-33 3 rows of 3 3 75 281/2 15 41/4 60.38 72.46 59.98 71.98 41.86 50.22 BMC-43 4 rows of 3 3 100 36 15 41/4 71.00 85.20 73.44 88.12 51.90 62.28 SMC-43 2 rows of 4 4 50 21 18 41/4 \$57.94 \$69.52 \$53.04 \$63.64 \$38.02 \$45.62 BMC-34 3 rows of 4 4 75 281/2 18 41/4 69.36 89.02 69.36 83.24 50.92 61.10 BMC-44 4 rows of 4 4 100 36 18 41/4 81.60 97.92 84.86 101.84 64.96 77.94 BMC-54 5 rows of 4 4 125 431/2 18 41/4 92.62 111.14 100.86 121.02 79.96 95.96 BMC-64 6 rows of 4 4 150 51 18 41/4 107.30 128.76 117.50 141.00 95.96 115.16										
BMC-23 2 rows of 3 3 50 21 15 4½ \$51.40 \$61.68 \$46.92 \$56.30 \$31.82 \$38.18 BMC-33 3 rows of 3 3 75 28½ 15 4½ 60.38 72.46 59.98 71.98 41.86 50.22 BMC-43 4 rows of 3 3 100 36 15 4½ 71.00 85.20 73.44 88.12 51.90 62.28										
BMC-33 3 rows of 3 3 75 28½ 15 4¼ 60.38 72.46 59.98 71.98 41.86 50.22 BMC-43 4 rows of 3 3 100 36 15 4¼ 71.00 85.20 73.44 88.12 51.90 62.28										
## VOLT CABINETS  BMC-24 2 rows of 4 4 50 21 18 4½ \$57.94 \$69.52 \$53.04 \$63.64 \$38.02 \$45.62 BMC-34 3 rows of 4 4 75 28½ 18 4½ 69.36 89.02 69.36 83.24 50.92 61.10 BMC-44 4 rows of 4 4 100 36 18 4½ 81.60 97.92 84.86 101.84 64.96 77.94 BMC-54 5 rows of 4 4 125 43½ 18 4½ 92.62 111.14 100.86 121.02 79.96 95.96 BMC-64 6 rows of 4 4 150 51 18 4½ 107.30 128.76 117.50 141.00 95.96 115.16										
BMC-24 2 rows of 4 4 50 21 18 4½ \$57.94 \$69.52 \$53.04 \$63.64 \$38.02 \$45.62 BMC-34 3 rows of 4 4 75 28½ 18 4½ 69.36 89.02 69.36 83.24 50.92 61.10 BMC-44 4 rows of 4 4 100 36 18 4½ 81.60 97.92 84.86 101.84 64.96 77.94 BMC-54 5 rows of 4 4 125 43½ 18 4½ 92.62 111.14 100.86 121.02 79.96 95.96 BMC-64 6 rows of 4 150 51 18 4½ 107.30 128.76 117.50 141.00 95.96 115.16										
BMC-34 3 rows of 4 4 75 28½ 18 4¼ 69.36 89.02 69.36 83.24 50.92 61.10 BMC-44 4 rows of 4 4 100 36 18 4¼ 81.60 97.92 84.86 101.84 64.96 77.94 BMC-54 5 rows of 4 4 125 43½ 18 4¼ 92.62 111.14 100.86 121.02 79.96 95.96 BMC-64 6 rows of 4 4 150 51 18 4¼ 107.30 128.76 117.50 141.00 95.96 115.16 5 VOLT CABINETS										
BMC-34 3 rows of 4 4 75 28½ 18 4¼ 69.36 89.02 69.36 83.24 50.92 61.10 BMC-44 4 rows of 4 4 100 36 18 4¼ 81.60 97.92 84.86 101.84 64.96 77.94 BMC-54 5 rows of 4 4 125 43½ 18 4¼ 92.62 111.14 100.86 121.02 79.96 95.96 BMC-64 6 rows of 4 4 150 51 18 4¼ 107.30 128.76 117.50 141.00 95.96 115.16 5 VOLT CABINETS										
BMC-54 5 rows of 4 4 125 43½ 18 4½ 92.62 111.14 100.86 121.02 79.96 95.96 BMC-64 6 rows of 4 4 150 51 18 4½ 107.30 128.76 117.50 141.00 95.96 115.16 5 VOLT CABINETS										
BMC-64 6 rows of 4 4 150 51 18 4 107.30 128.76 117.50 141.00 95.96 115.16 5 VOLT CABINETS										
5 VOLT CABINETS										
BMC-25 2 rows of 5 5 75 21 21 414 \$63.64 \$76.38 \$60.38 \$72.46 \$45.04 \$54.04										
BMC-35 3 rows of 5 5 75 28½ 21 4½ 77.92 93.52 78.42 94.10 59.96 71.98 BMC-45 4 rows of 5 5 100 36 21 4½ 90.98 97.92 109.18 115.06 76.06 91.24										
BMC-55 5 rows of 5 5 125 43½ 21 4½ 108.94 111.14 130.72 136.60 93.10 111.72										
BMC-65 6 rows of 5 5 150 51 21 4½ 125.66 128.76 150.80 158.64 112.12 134.54										
6 VOLT CABINETS										
BMC-26 2 rows of 6 6 50 21 24 41/4 \$69.36 \$83.24 \$67.72 \$81.28 \$50.92 \$61.10										
BMC-36 3 rows of 6 6 75 281/2 24 41/2 87.32 105.26 88.12 105.76 70.02 84.02										
BMC-46 4 rows of 6 6 100 36 24 4½ 105 68 126 80 108 52 130 24 90 58 108 70										
BMC-56 5 rows of 6 6 125 43½ 24 4½ 124.04 148.84 128.93 154.72 113.10 135.72										
BMC-66 6 rows of 6 6 150 51 24 4½ 141.98 170.38 151.64 181.96 134.64 161.56										
* 8 VOLT CABINETS										
BMC-28 2 rows of 8 8 50 21 30 414 \$74.26 \$89.10 \$84.86\$101.84 \$65.12 \$78.14										
BMC-38 3 rows of 8 8 75 28½ 30 4½ 98.32 118.00 110.98 133.18 90.08 108.10										
BMC-48 4 rows of 8 8 100 36 30 4½ 122 40 146 88 137 90 165 48 116 68 140 02 BMC-58 5 rows of 8 8 125 43½ 30 4½ 146 48 175 76 164 84 197 80 146 22 175 48										
BMC-68 6 rows of 8 8 150 51 30 4½ 156.12 187.36 191.76 230.12 178.70 214.44										
10 VOLT CABINETS										
BMC-210 2 rows of 10 10 50 21 36 4½ \$85.68\$102.82\$110.16\$132.20 \$79.16 \$94.98 BMC-310 3 rows of 10 10 75 28½ 36 4½ 117.10 140.52 140.36 168.42 110.16 132.28										
BMC-310 3 rows of 10 10 75 28½ 36 4½ 117.10 140.52 140.36 168.42 110.16 132.28 BMC-410 4 rows of 10 10 100 36 36 4½ 147.70 177.24 164.84 197.80 142.80 171.36										
BMC-510 5 rows of 10 10 125 4314 36 414 178 30 213 96 193 80 232 56 178 86 214 64										
BMC-610 6 rows of 10 10 150 51 36 414 208.70 250.68 236.92 277.12 216.90 260.28										
12 VOLT CABINETS										
BMC-212 2 rows of 12 12 50 21 42 41/4 \$99.56\$119.46\$122.40\$146.88\$94.00\$112.80										
BMC-312 3 rows of 12 12 75 $28\frac{1}{2}$ 42 $4\frac{1}{4}$ 136.28 163.52 159.12 190.94 130.72 156.86										
BMC-412 4 rows of 12 12 100 36 42 414 173 00 207 60 195 84 235 00 169 40 203 28										
BMC-512 5 rows of 12 12 125 43½ 42 4½ 209.72 251.66 232.56 279.08 212.32 254.78										
BMC-612 6 rows of 12 12 150 51 42 41/4 246.44 295.72 270.92 325.08 258.50 310.22										

Dimensions given above are over all dimensions of boxes; dimensions of trim in flush steel sets are always 3 inches greater than dimensions of box $-1\frac{1}{2}$  inches on each side; dimensions of trim in flush oak sets are always 5 inches greater than dimensions of box $-2\frac{1}{2}$  inches on each side. Depth of box in flush sets only,  $3\frac{1}{4}$  inches.

Double doors will be regularly furnished in all oak cabinets. If double doors are wanted on extra wide steel sets, add 15 per cent. to above list prices; drop-front doors will be regularly furnished on extra wide steel sets.

No battery cells are included in above prices. Patterson Columbia Cartridge Cells extra.

All cabinets are furnished with substantial cylinder locks and two keys.

Standard finish of wood is quartered oak, hand rubbed; of steel, black enamel.

Special cabinets will be made to order at slight advance over regular prices shown above.

Solid hard rubber Model A strips in place of skeleton, will be furnished in above battery sets, when so ordered, at an advance of \$1.80 cents per cell unit.

Delivery F. O. B. New York City. For warehouse deliveries write nearest house.

#### 2 CIRCUIT RESERVE WALL CABINET TYPES MODEL "BDC"



Model RDC-26

# Model BDC-26—Surface Steel—25 Amp.—6 Volts WITH THROW-OVER SWITCH

BDC Outfits shown above, are designed to meet the demands for a low-priced reserve or throw-over type of battery set; BDC Outfits are not as desirable as the Multiple Service BMC models shown on other pages, where the entire bank of cells is in service whenever the circuit is closed, but many architects and engineers demand a reserve type outfit with a throw-over switch, and to meet this demand the BDC line has been developed.

BDC Reserve Sets have two separate sets of cells with a first-class throw-over switch, so that in an

emergency the reserve battery (one-half the total number of cells in the case), may be thrown into circuit—either upper half or lower half of the battery being available by throwing switch to right or left.

It should not be forgotten that these BDC Outfits do not permit the battery being used in multiple, as do BMC and BUC—the economical modern method of using battery—neither can all the cells in these 2 circuit reserve BDC Outfits be thrown into series—a valuable BUC feature.

All BDC Battery Sets have individual circuit fuses, automatically protecting battery set in case of accidental short circuit without disturbing operation of apparatus other than on the circuit in trouble; also separate compartment for circuit-wire distribution and connections, as clearly shown in cut.

Special BDC Cabinets of larger size to order—prices upon application.

#### SINGLE SERIES RESERVE 25 Ampere Outfits

		Initial					*Lis	t Price Eacb	, No Batteri	ies——
		Opera-	Amp.	Approx.	Overall	Size of	Polish	ed Oak	Pressed	Steel
List	General	tive	Capa-		ox, Inche		Panele	d Doors	Grade	e B
No.	Description	Voltage	city	Height	Width	Depth	Surface	Flush	Surface	Flush
BDC- 24	2 rows of 4 cells	4	25	$28\frac{1}{2}$	18	4 ½	<b>\$74.80</b>	<b>\$</b> 94 . <b>4</b> 6	<b>\$</b> 56.36	<b>\$</b> 66 . 54
BDC- 25	2 rows of 5 cells	5	25	$28\frac{1}{2}$	21	41/2	81.32	96.92	63.38	75.38
BDC- 26	2 rows of 6 cells	6	25	281/2	24	41/4	89.08	106.62	71.30	<b>85</b> .78
BDC- 28	2 rows of 8 cells	8	25	$28\frac{1}{2}$	30	41/4	95.60	115.28	87.36	105.38
BDC-210	2 rows of 10 cells	10	25	$28\frac{1}{2}$	36	41/4	110.30	133.72	<b>103</b> .36	125.40
BDC-212	2 rows of 12 cells	12	25	$28\frac{1}{2}$	42	41/4	125.40	152.64	119.84	145.98

#### SINGLE MULTIPLE RESERVE 50 Ampere Outfits

#### (4 Times Service Life of 25 Ampere)

BDC- 44½	4 rows of 4 cells	4	50	$43\frac{1}{2}$	18	41/4	<b>\$</b> 98.06	\$116.58	<b>\$</b> 85.40	\$101.40
BDC- 45½	4 rows of 5 cells	5	50	431/2	21	41/4	112.34	134.00	96.50	115.12
BDC- 46½	4 rows of 6 cells	6	50	$43\frac{1}{2}$	24	41/4	125.40	150.20	114.46	137.10
BDC- 48½	4 rows of 8 cells	8	50	431/2	30	41/4	143.76	173.04	143.50	172.74
BDC-4101/2	4 rows of 10 cells	10	50	$43\frac{1}{2}$	36	41/4	171.50	207.16	172.06	207.84
BDC-4121/2	4 rows of 12 cells	12	50	$43\frac{1}{2}$	42	41/4	198.84	<b>240.76</b>	201.44	243.90

In ordering, always specify whether surface steel, surface oak, flush steel or flush oak is desired.

Drop-front doors will be regularly furnished on extra wide steel sets.

Double doors will be furnished on all oak cabinets.

No battery cells are included in above prices. Patterson-Columbia Cartridge Cells extra.

All cabinets are furnished with substantial cylinder locks and two keys.

Standard finish of wood is quartered oak, hand rubbed; of steel, black enamel.

Special cabinets will be made to order at slight advance over regular prices shown above.

Solid hard rubber Model A strips in place of skeleton will be furnished in above battery sets, when so ordered, at an advance of \$1.80 list per cell unit.

Always use Patterson-Columbia Ignitor Cells in Patterson Battery Sets.

\*Delivery F. O. B. New York City. For warehouse deliveries write nearest house.

List Price

# EDISON PRIMARY BATTERIES AND RENEWALS

#### 200 HOUR-AMPERE TYPES—CONTINUED



	Size over all, $5\frac{3}{4} \times 9$ inches. Jar only, inside dimension $5 \times 7\frac{1}{2}$ inches.
1.00	List Price
3	No. Description Each
	340000 Complete Cell with Porcelain Jar and Hollow Rubber Gasket Ring
	340001 Complete Renewal
	Renewal Parts
, <del>.</del>	340002 Zinc-Oxide, assembled
	340003 One Can Caustic Soda
	340004 One Bottle Special Battery Oil
	Adapted for motor boats. Use five cells for single cylinder; six cells for multiple
Type No. 206	cylinder, make-and-break engines. Use eight cells for jump-spark.  Cover is fitted with a hollow rubber gasket to prevent splashing.

**TYPE 208** Size over all,  $6 \times 9$  inches. Jar only, inside dimension  $5 \times 7\frac{1}{2}$  inches.



List

Description No. Each 340007 Complete Cell with Porcelain Jar..... \$4.40 340008 Complete Renewal..... 3.00 Renewal Parts 340002 Zinc-Oxide, assembled.
340003 One Can Caustic Soda.
340004 One Bottle Special Battery Oil. .32 Adapted for stationary gas or gasoline engines, small motors, burglar alarms, bell systems, program and self-winding clocks, annunciators, electric Time stamps, mine signals, intercommunicating telephone systems, talking circuits for way station telephones in railway

train dispatching systems, etc.

Use five cells for stationary engines having make-and-break ignition. Use eight cells for stationary engines having jump-spark ignition. Type No. 208

**TYPE 212** 

	over all, $3\frac{1}{2} \times 6 \times 11\frac{3}{4}$ inches. Jar only, inside dimension $2\frac{1}{4} \times 5\frac{1}{4} \times 9\frac{1}{4}$ inches.							
List No.	Description Complete cell with heat resisting glass jar and rubber gasket	List Pri	ce Each					
340537	Complete cell with heat resisting glass jar and rubber gasket		<b>\$</b> 5.90					
340538	Complete renewal		3.00					
Renewal Parts								
340002	Zinc-Oxide, assembled		\$2.80					
340003	One Can Caustic Soda		.32					
340004	One Bottle Special Battery Oil		.12					
This	s cell is the same as type 202 excepting that it is splash-proof when in trays with cla	mping s	attach-					

ments. Adapted for the same purposes as Type 206.

Note: Terminal nuts are not supplied with renewals. With numbered types zincs and oxides are not furnished separately; these plates are only supplied assembled in frame with suspension bolt attached.



# 300 Ampere-Hour Types

Size o	ver all, $3\frac{1}{4} \times 6 \times 12\frac{1}{2}$ inches. Jar only, inside dimension $2\frac{1}{6} \times 5\frac{1}{4} \times 10$ in								
List		st Price							
No.	Description	Each							
340539	Description Complete cell, with heat resisting glass jar	\$6.00							
340540	Complete renewal	3.60							
Renewal Parts									
340012	Zinc-oxide, assembled	<b>\$</b> 3.40							
340013	One can Caustic Soda	.40							
340014	One bottle Special Battery Oil	.12							
For	stationary gas or gasoline engines, burglar alarms, bell systems, progra								

self-winding clocks, intercommunicating telephone systems, fire alarms, etc.

Type No. 302

TYPE 305

	we over all, $6\frac{3}{4}$ x $10\frac{1}{4}$ inches. Jar only, inside dimension 6 x 8 inches.							
340009	Complete cell, with porcelain jar	<b>\$</b> 6.00						
340010	Complete cell, with heat resisting glass jar	6.40						
	Complete renewal							
Renewal Parts								
340012	Zinc-oxide, assembled	<b>\$</b> 3.40						
340013	One can Caustic Soda	.40						
340014	One bottle Special Battery Oil	.12						
Adapted for stationary gas or gasoline engines, burglar alarms, bell systems, program								

and self-winding clocks, intercommunicating telephone systems, auxiliary fire alarm

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Type No. 305

34

Batteries and Accessories

circuits, etc.

List

Price

Each

4.20

\$7.60

\$4.00

.48

.12

Western Electric

# EDISON PRIMARY BATTERIES AND RENEWALS

# 400 Ampere-hour Types



Type No. 401

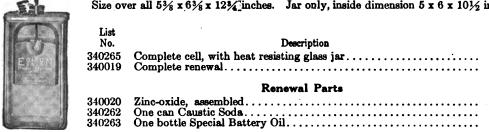
#### TYPE 401

Size over all  $6\frac{1}{4}$  x  $12\frac{1}{2}$  inches. Jar only, inside dimension  $6 \times 10\frac{1}{2}$  inches.

	•	List
List		Price
No.	Description	Each
340017	Complete cell, with porcelain jar	\$7.40
340018	Complete cell, with heat resisting glass jar	7.60
340019	Complete renewal	4.20
	Renewal Parts	
340020	Zinc-oxide, assembled	\$4.00
340262	One can Caustic Soda	.48
340263	One bottle Special Battery Oil	
	railway signals, crossing bells, battery motors, telephone train dispa	atcher's
talking	circuits, etc.	

#### **TYPE 402**

Size over all  $5\frac{3}{8} \times 6\frac{3}{8} \times 12\frac{3}{4}$  inches. Jar only, inside dimension  $5 \times 6 \times 10\frac{1}{2}$  inches.



Type No. 402

#### **TYPE 403**

Size over all  $7\frac{1}{2} \times 10\frac{3}{4}$  inches. Jar only, inside dimension  $6\frac{5}{8} \times 8\frac{3}{4}$  inches.



340263

Туре No. 403

List No.	Description	Price Each
340267 340019	Complete cell, with porcelain jar	\$7.20 4.20
	Renewal Parts	
340020 340262	Zinc-oxide, assembledOne can Caustic Soda	

For railway crossing signals, mine signals, fire alarms, burglar alarms, program and self-winding clocks, small common battery telephone exchanges, private branch exchanges, intercommunicating telephones, pole changers, supervisory lamps, trunk line relays, telephone train dispatchers' talking circuits, etc.

One bottle Special Battery Oil.....

#### **TYPE 404**

Size over all 7 x 111/2 inches.



Type No. 404

Lıst No.	Description	Price Each
340268 340019	Complete cell, with barrel shape heat resisting glass jar	
	Renewal Parts	
340020 340262	Zinc-oxide	\$4.00 .48
340263	One bottle Special Battery Oil	.12

Suitable for all purposes for which Types 401 and 403 are recommended. It is more efficient than Type 403 because of better location of plates, and when not exposed to extreme cold is fully as good as Type 401. The jar has greater mechanical strength than glass jars with straight sides.

List

# EDISON PRIMARY BATTERIES AND RENEWALS

# 500 Ampere-hour Types

#### **TYPE 501**

Size over all  $6\frac{3}{4} \times 12\frac{1}{2}$  inches. Jar only, inside dimensions  $6 \times 10\frac{1}{2}$  inches.



Type 501-Glass

	· · · · · · · · · · · · · · · · · · ·	
List No.	Description	List Price Each
340542	Complete cell, with heat resisting glass jar	\$8.20
340543	Complete renewal	4.80
	Renewal Parts	
340544	Zinc-Oxide, assembled	\$4.60
340545	One can caustic soda	. 56
340546	One bottle special battery oil	.12

For railway signals, crossing bells, battery motors, telephone train dispatchers' talking circuits, etc.

#### **TYPE 502**

Size over all,  $5\frac{3}{8} \times 6\frac{3}{8} \times 12\frac{1}{4}$  inches. Jar only, inside  $5 \times 6 \times 10\frac{1}{2}$  inches.

List No.	Description	List Price Each
340547 340548	Complete cell, with rectangular heat resisting glass jar	\$8.20 4.80
	Renewal Parts	



	itolic wal I alto	
340544	Zinc-Oxide, assembled	\$4.60
340545	One can caustic soda	.56
340546	One bottle special battery oil	.12

Recommended for railway signals, crossing bells, battery motors, and especially for talking circuits in dispatchers' offices, for electro-mechanical interlocking plants and for automatic signals.

The advantage of the rectangular jar is that a greater number of cells may be housed in a given space than is possible with round jars.



Size over all  $7 \times 11\frac{1}{2}$  inches.



**Type 502** 

**Type 504** 

List Price Description ' No. Each 340549 Complete cell, with barrel shape heat resisting glass jar...... \$8.00 340550 Complete renewal..... 4.80 Renewal Parts 340544 \$4.60 340545 One can caustic soda..... .56 .12 340546 One bottle special battery oil.....

Suitable for all purposes for which type 501 is recommended. It is more efficient because of better location of plates, and when not exposed to extreme cold is fully as good as type 501. The jar has greater mechanical strength than glass jars with straight sides.

#### R. S. A. SIGNAL CELL

Types 501 and 504 conform to Railway Signal Association Specifications for copper-oxide, zinc and soda primary battery, known as RSA Signal Cell

35

List

.80

Type W

# PRIMARY BATTERIES AND RENEWALS

# Edison Cells-Old Types

TYPE W

Size over all 73/4 x 15 inches. Jar only, inside dimension 7 x 131/2 inches. Capacity 600 Ampere-hours List

Price No. Each 340310 Complete Cell with Porcelain or Heat Resisting Glass Jar..... \$13.00 Complete Renewal..... 340311 6.00 Renewal Parts Two Copper-Oxide Plates (each \$1.46).
Two Zinc Plates (each \$0.86).
One can Caustic Soda.
One bottle Special Battery Oil. 340312 \$3.40 340313 2.00

340315 . 16 Adapted for battery motors, dental engines, light electro-cautery work, X-Ray, wireless telegraph coils, telephone interrupters, small common battery and private branch exchange telephone switchboards, supervisory lights, trunk line relays, talking circuits, etc.

Complete Summary of Edison Primary Batteries, Renewals and Plates

Type of Cell	Ampere Hour Capa- city	Complete Cell	Com- plete Renewal	Zinc- Oxide Assembled	One Charge Copper- Oxide Plate or Plates	Charge Zinc Plate or Plates	One Can Caustic Soda	One Bottle Special Oil	Round Porc. Jar	Round Heat Resisting Glass Jar	Rect- angular Heat Re- sisting Glass Jar
202 Glass	200	\$5.40	\$3.00	\$2.80	*	CUAN S	\$0.32	\$0.12			\$2.00
206 Porc.	200	4.80	3.00	2.80			.32	.12	\$1.20		
207 Steel	200		3.00	2.80			.32	.12	1	47	
208 Porc.	200	4.40	3.00	2.80			.32	.12	1.20		
212 Glass	200	5.90	3.00	2.80			.32	.12			2.00
302 Glass	300	6.00	3.60	3.40			.40	.12			2.20
305 Porc.	300	6.40	3.60	3.40			.40	.12	2.00		20000
305 Glass	300	6.80	3.60	3.40			.40	.12		\$2.40	*****
309 Porc.	300		3.60	3.40			.40	.12			
401 Porc.	400	7.60	4.00	4.20			.48	.12	2.80		
401 Glass	400	7.80	4.00	4.20			.48	.12		3.00	
402 Glass	400	7.60	4.00	4.20			.48	.12			2.56
403 Porc.	400	7.20	4.00	4.20			.48	.12	2.40		
404 Glass	400	7.60	4.00	4.20			.48	.12		2.80	
501 Glass	500	8.20	4.40	4.60			. 56	.12		3.00	
502 Glass	500	8.20	4.40	4.60			. 56	.12			3.20
504 Glass	500	8.00	4.40	4.60			.56	.12			Terre
BB Porc.	100		1.80		\$0.80	\$0.80	.28	.10			
Q Porc.	150	4.40	2.00	****	1.00	.80	.32	.12	1.20		
V-P Porc.	150	4.80	2.20		1.00	1.00	.32	.12	1.20		
V Steel	150		2.20		1.00	1.00	.32	.12			
RR Porc.	300	6.60	3.40		1.70	1.40	.48	.12	2.00		
S Porc.	300		3.72		2.00	1.60	.40	.12			
W	600	13.00	6.00		3.40	2.00	.80	.16	6.00	6.00	

Type of Cell	Ampere Hour Capacity	Barrel Shaped Heat Resisting Glass Jar	Porc. Cover	Rubber Gasket	Copper Frames With Insulators Complete	Long Brass Bolts and Nuts for Zincs	Copper Frame Sides 2 Per Cell	Copper Frame Bolts and Nuts	Brass Air Vents and Nuts
202 Glass	200		\$0.60						
206 Porc	200		.80	\$0.50					
207 Steel	200		.80	. 50					
208 Porc	200		.70						
212 Glass	200		. 60	. 50					
302 Glass	300		.60		1,000	T		1711.13	athmess.
305 Pore	300		.90			17. 19. 19. 19.			71
305 Glass	300		.90						
309 Porc	300		.70	7					
401 Porc	400		.90						
401 Glass	400		.90				1.1.10		
402 Glass	400		.70						
403 Porc	400		1.00						
404 Glass	400	\$2.80	.90						
501 Glass	500		.90	1				1.771010	13953
502 Glass	500		.70	11		1			
504 Glass	500	2.80	.90						*****
BB Porc	100		.40		\$0.90		\$0.40	\$0.20	10000
Q Porc	150		.70		.90	\$0.30	.40	.20	TOUGHT
V-P Porc	150		.70	.50	.90		.40	.20	\$0.20
V Steel	150		.70	.50	.90		.40	.20	.20
RR Porc	300		1.00		.90	.30	.40	.20	
S Porc	300		.70		1.20	.30	.60	.40	
w	600	Lanner .	.70	D. increase	1.40	,30	.80	.40	

\* Complete cells and jars for same not now supplied.

340314

Miscellaneous Separate Parts						
Terminal Nuts and Washers, per cell	\$0.40					
Large wing Nuts, each	. 20					
Hexagon Jamb Nuts, each	. 10					
Nuts. other sizes.	. 10					
Brass Washers, each	. 10					
Double Connectors, each	. 20					
Hard Rubber Insulators (used with lettered types only), each. In ordering rubber gastes be careful to state avacity the type of cell for which their avairable to the control of the type of cell for which their avairable to the control of the type of cell for which their avairable to the control of the type of cell for which their avairable to the control of the type of cell for which their avairable to the control of the type of the type of cell for which their avairable to the type of type of type of the type of typ	. 10					
In ordering supher goalets, he careful to state exactly the tune of call for which they are required // //						

40

### STANDARD BATTERIES AND SUPPLIES



Standard Carbon Cell Round Jar



Standard Carbon Cell Square Jar

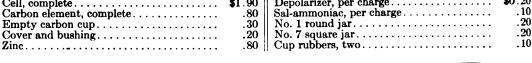


National No. 2 Carbon

#### CARBON CYLINDER BATTERY

No. 1 With Round Jar	No. 7 With Square Jar		
	List Price	1	List Price
Description	Each	Description	Each
Cell, complete	. \$0.95	Cell, complete	. \$0.95
Carbon cylinder, with bushings	45	Carbon cylinder with bushings	45
Glass jar, round		Glass jar, square	20
Pencil zinc	20	Pencil zinc	
Sal-ammoniac charge	10	Sal-ammoniac charge	10

### NATIONAL NO. 2 AND 21/2 CARBON BATTERIES





Gonda Cell with Cylindrical Zinc Complete



Jar Cover and Zinc Negative Element



Gravity Battery



Blue Vitriol



Sal-Ammoniac

#### **GRAVITY BATTERY**

Size b x / Inches		Size 6 x 8 Inches			
	List Price		List Price		
Description	Each	Description	Each		
Cell, complete	\$3.60	Cell, complete	\$4.00		
Glass jar, 5 x 7 ins		Glass jar, 6 x 8 ins			
Zinc	On application	Zinc, 23/4 lbs	n application		
Copper	.On application	CopperOi	n application		
Blue vitriol not included in pric	es.	Blue vitriol not included in prices.			

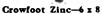
# Blue Vitriol and Sal-ammoniac

#### **BLUE VITRIOL**

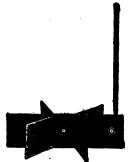
Desc Blue vitriol, Star Brand	ription	Approx. Lbs. per Bbl. 450	Price
	SAL-AMMONIAC		
Sal-ammoniac (extra quality), bbl. lots, Sal-ammoniac (extra quality), per 5 oz.	per lb	$$ Digitized by $\begin{bmatrix} 525 \\ 009 \end{bmatrix}$	On application
Batteries and Accessories	41-42	0	

# **BATTERY SUPPLIES**









Battery Copper

# **Battery Zincs**

	Std.	Lbs.	
Description	Pkg.	per 100	Price
Crowfoot zinc—for 5 x 7 in. jar	100	175 )	
Crowfoot zinc—for 5 x 7 in. jar. Crowfoot zinc—for 6 x 8 in. jar.	100	300	
Crowtoot zinc—for 6 x 8 in. jar	100	325	
Star zinc—for 6 x 8 in. jar	100	300	O
Star zinc. for $5 \times 7$ in. jar	100	200	On application
R. S. A. Standard—for 6 x 8 in. jar	100	400	
Gamwell zinc—for 6 x 8 in. jar	50	200	
Gamwell zinc—for 5 x 7 in jar	50	150	
BATTERY COPPERS		•	
	Std.	Wt. per	
Description	Pkg.	Pkg. Lbs.	Price
Battery copper—for 5 x 7 in. jar	500	50 )	
Battery copper—for 5 x 7 in. jar Battery copper—for 6 x 8 in. jar	500	62 }	On application
PENCIL ZINCS		,	Price
Square pencil zinc with copper binding screw	500	85 <b>)</b>	
Round pencil zinc	500	85 }	On application
		,	



**Bull Dog Connector** 

340424



No. 155

# **Bull Dog Connectors**

List No. 1026 1025	Bull Dog connector, phosphor bronze terminals, nickel plated Bull Dog connector, spring brass terminals, brass dipped		List Price Each \$0.20 .20	List Price per 100 \$9.00 8.00
	No. 155 Connector			
List No. 155	No. 155 connector	· · · · · · · · · · · · · · · · · · ·	List Price Each \$0.20	List Price per 100 \$6.50
0				
	Plain Connector Lin	k Connecto	<b>1</b>	•

Plain Battery Connector

Cons	ists of 5 inches of lamp cord, composed of several strands of copper wire, w	ith copper	terminals
List			List Price
No. 16357	Plain battery connector	Each \$0.20	per 100 \$6.00

Link Battery Connector

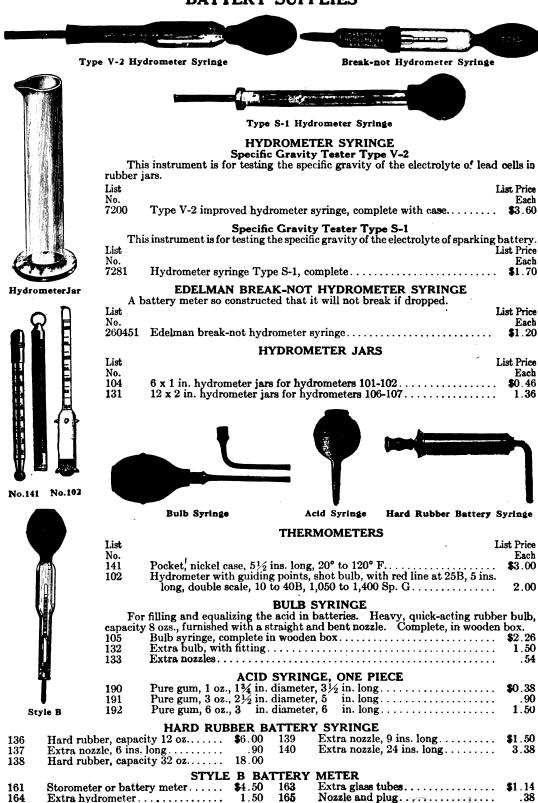
Quick-action battery connector..... **Batteries and Accessories** 

162

**Batteries and Accessories** 

Extra rubber bulbs.....

### BATTERY SUPPLIES

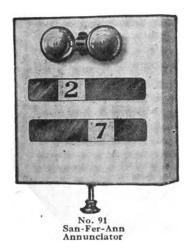


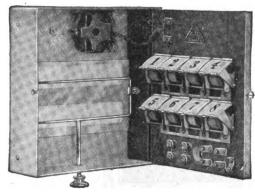
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# LOCK GRAVITY DROP ANNUNCIATOR

Standard House Type





Open View San-Fer-Ann Annunciator

# The San-Fet-Ann Sanitary Steel Annunciator No. 91

The San-Fer-Ann Annunciator has been produced to meet the requirements of architects and engineers who specialize on office building and apartment house work as well as to satisfy the growing demand for small

metal annunciators of simple design and neat appearance.

The San-Fer-Ann Annunciator is the last word in a high-class moderate cost instrument, and in the sanitary standard finish, white enamel with nickel-plated trimming, is an unusually attractive instrument; any discoloration may be instantly removed with a damp cloth. This case is made of steel, drop openings fitted with glass, and is secured to back board with substantial hinges on one side, and locks on other side with screw which locks into a keyholed slot, a new and very secure form of fastening.

The back board is the usual Edwards type of construction, set wholly inside of the case, the wood grain

running in two directions to prevent warping or twisting, at the same time imparting great strength.

The No. 800 drop is used, resulting in a most substantial and positive acting instrument in which accidental indication is impossible. Great attention has been given to the bell on the San-Fer-Ann because many of the annunciator trouble

are due to the use of faulty bells.

This bell has been specially designed for annunciator service. It has double magnets, armature supported on heavy pivots, widely spaced, broad face pure silver contact points with locking adjustment. All metal parts are thoroughly rust-proofed and no rubber is used for insulation.

The hammer ball protrudes through the front of the case between the two gongs and is covered by a metal bridge to protect it. A flexible cable connects bell to back board. This is a most desirable feature as the

bell is in circuit with case open or shut which greatly facilitates either connecting or testing.

Not furnished in other arrangement than listed.

Sizes 2 to 12 drops are packed in corrugated paper boxes.

No. of	Arr. of	Drops		Outside Dimensions			
Drops	Across	Down	Width, Ins.	Height, Ins.	Depth, Ins.	List Price	
2	2	1	61/8	43/4	21/8	<b>\$</b> 7.20	
3	3	1	67/8	43/4	21/8	8.10	
4	4	1	67/8	43/4	21/8	9.00	
5	3	${f 2}$	$6\frac{7}{8}$	$7\frac{1}{4}$	$2\frac{1}{8}$	9.90	
6	3	2	67/8	71/4	21/8	10.80	
8	4	2	61/8	71/4	$2\frac{1}{8}$	12.60	
10	5	2	81/4	71/4	$2\frac{1}{8}$	14.40	
12	4	3	71/8	9	$2\frac{1}{8}$	16.20	

Dimensions do not include bell or reset rod, for which add 11/4 inches to height for reset rod and 1 inch to depth for bell.

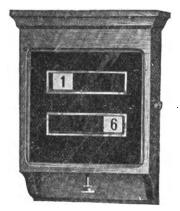
Finish: White enamel with nickel trimming. All other finishes special.

13 to 24 drops, add to list per drop..... 25 drops and over add to 12 drop list for each additional drop.....

Letters on glass up to 10 letters, list \$1.17. Each additional letter, list 7 cents. Delivery F. O. B. factory, New York City.

# **GRAVITY DROP ANNUNCIATORS**

# Standard House Types



Dixie No. 81



Dixie Annunciator Carton

# Western Electric

DIXIE NO. 81

Schedule "R"

The Dixie Annunciator meets the requirements of all classes of service where a moderate priced annunciator is desired. Each is packed neatly in an individual pasteboard carton with the style and type of contents marked plainly on the label. The glass is enameled, the openings for drops edged with gold. This annunciator is equipped with Dixie bell. These are not furnished in any special finishes or in other arrangement of drops than given, and are equipped with No. 800 Gravity Drop.

	Outside Dimensions———									
No. of	Arr. of	Drops-	Width	Height	Depth	*Li t				
Drops	Across	Down	Inches	Inches	Inches	Price				
2	2	1	8	85%	3	\$5.40				
3	3	1	8	85/8	3	6.30				
4	4	1	8	85/8	3	7.20				
5	3	2	8	101/4	3	8.10				
6	3	2	8	101/4	3	9.00				
7	4	2	8	101/4	3	9.90				
8	4	2	8	101/4	3	10.80				
10	5	2	93/4	101/4	3	12.60				
12	6	2	111/4	101/4	3	14.40				
13 to 55 dr	ops, add per drop	list		• • • • • • • • • • • • • • • •	· · · · · · · · · · · · · · · · · · ·	1.12				
56 to 100, a	dd per drop list			• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	1.36				

Finish: Filled and varnished oak only.

Electrical or automatic reset not furnished.

\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

# GRAVITY DROP ANNUNCIATORS

# Standard House Types





Arrow No. 125

Arrow No. 125M

#### THE ARROW NO. 125 WOOD CASE

Schedule "E"

A strictly high grade carefully cabineted annunciator; equipped with No. 800 gravity drops wound with enamel wire.

WICH CHARL				Outside Dimension	ş	
No. of	Arr. of	Drops	Width	Height	Depth	*List
Drops	Across	Down	Inches	Inches	Inches	Price
2	<b>2</b>	1	$6\frac{1}{4}$	$6\frac{1}{4}$	3	<b>\$</b> 8. <b>0</b> 0
3	3	1	$7\frac{7}{8}$	$6\frac{1}{4}$	33/4	9.60
4	4	1	$7\frac{7}{8}$	61/4	334	12.80
6	3	${f 2}$	$7\frac{7}{8}$	$7\frac{7}{8}$	33/4	17.28
8	4	${f 2}$	$7\frac{7}{8}$	$7\frac{7}{8}$	33/4	23.04
10	5	<b>2</b>	$9\frac{7}{8}$	$7\frac{7}{8}$	33/4	<b>28</b> .8 <b>0</b>
12	6	<b>2</b>	111/4	71/8	33/4	34.56
15	5	3	$97\frac{7}{8}$	1034	33/4	42.00
18	6	3	111/4	103/4	334	<b>50</b> .40
20	5	4	97/8	131/2	$3\frac{3}{4}$	56.00
24	6	4	111/4	$13\frac{1}{2}$	$3\frac{3}{4}$	67.20
Over 24 dr	ons add per drop	list.	<b>\$</b> 2.80		, <del>-</del>	

Finish: Filled, varnished and oil-rubbed oak, ash or any ordinary wood.

THE	<b>ARROW</b>	NO.	125-M	<b>METAL</b>	CASE	Schedule	"E"
				_Outside T	limongiona		

	Outside Dimensions———										
No. of	Arr. of Di	ops	Width	Height	Depth	*List					
Drops	Across	Down	Inches	Inches	Inches	Price					
2	${f 2}$	1	$5\frac{5}{8}$	$5\frac{5}{8}$	3	\$9.60					
3	3	1	$7\frac{5}{8}$	$5\frac{5}{8}$	3	12.00					
4	4	1	75%	55/8	3	16.00					
6	3	2	75%	7	3	21.60					
8	4	2	75%	7	3	28.80					
10	5	2	958	7	3	36.00					
12	6	2	11	7	3	43.20					
15	5	3	91/8	103/4	33/4	47.60					
18	6	3	111/4	103⁄2	3 3 1/2	61.92					
20	5	4	$9\frac{7}{8}$	$13\frac{1}{2}$	33/4	72.00					
24	. 6	4	1114	131/2	33/	82.56					
Orran 24 day	one odd nor dron lief		<b>Q</b> Q 11	, 4	-/-						

Over 24 drops, add per drop list. . . . . . Finish: Black Rubber Enamel, Brush brass or other ordinary metal finishes. Wood finishes to match wood trim, add to list 25%.

#### Special Finish, Lettering, Setback and Lamp Signal Attachment

These dimensions do not include the bell on top, nor the reset knob on the bottom, for which add 31/2 inches to the height.

For white enamel finish, add to list: .

2 to 12 drop..... 13 to 24 drop.....

Lettering on glass up to 10 letters, list, 1.04; each additional letter, list, 6 cents. Electrical setback, up to 20 drops, add to list, \$12.00; over 20 drops, add to list \$24.00. Automatic setback up to 20 drops, add to list, \$12.80; over 20 drops, add to list, \$25.60. With electrical or automatic setback, add to height of case 1½ inches.

For Lamp Signal Attachment, listed on previous page, add to list \$6.00. **Note:** Heavy faced type indicates finish supplied when not otherwise specified.

Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

# **GRAVITY DROP ANNUNCIATORS** Standard House Types



No. 213

#### 18TH CENTURY NO. 213

Schedule "E"

The case of this annunciator is a consistent 18th century design. It is entirely hand made, each piece of wood being carefully selected for quality and grain, the finished case being a fine example of the high skilled cabinetmaker's art. It is not made in the small sizes, but can be furnished as large as wanted. The backboard is our standard building type, and every effort has been made to make this the best that is possible to produce. The drop is the No. 800 shallow lock gravity type and the Re-al monitor bell is used.

	Outside Dimensions———										
No. of	Arr. of	Drops	Width	Height	Depth	*List					
Drops	Across	Down	Inches	Inches	Inches	Price					
6	3	<b>2</b>	161/2	$20\frac{1}{8}$	r <b>6</b>	\$38.40					
8	4	<b>2</b>	$16\frac{1}{2}$	$20\frac{1}{8}$	6	48.00					
10	5	<b>2</b>	18	201/8	6	<b>56</b> .00					
12	6	<b>2</b>	191/2	201/8	6	63.04					
15	8	<b>2</b>	$22\frac{1}{2}$	201/8	6	<b>72.00</b>					
20	5	4	18	$25\frac{5}{8}$	$5\frac{1}{8}$	96.00					
24	6	4	191/2	$25\frac{5}{8}$	$5\frac{1}{8}$	132.00					
36	9	4	24	$25\frac{5}{8}$	6	129.60					
40	10	4	$25\frac{1}{2}$	$25\frac{5}{8}$	6	144.00					
<b>50</b>	10	5	$25\frac{1}{2}$	285%	6	172.00					
60	12	5	$28\frac{1}{2}$	285%	6 •	<b>206</b> .40					
80	16	5	$34\frac{1}{2}$	$28\frac{5}{8}$	6	<b>243</b> .20					
100	20	5	$40\frac{1}{2}$	285/8	· 6	<b>304</b> .00					

Dimensions do not include bell on top, nor reset knob on bottom, for which add 31/4 inches to height. Extra Drops up to 250, add per-drop......\$3.04

Intermediate Sizes: For intermediate sizes deduct \$1.60 per drop from the list price of the next larger size listed.

Finish: Filled, varnished and oil-rubbed oak, ash or any ordinary wood.

### Special Finish, Lettering, Setback and Lamp Signal Attachment

For white enamel finish, add to list:

Less than 12 drop	<b>\$</b> 9.60
12 to 24 drop	11.20
25 to 55 drop	16.00
56 to 100 drop	19.20

Lettering on glass, up to 10 letters, list, \$1.04; each additional letter, list, 7 cents. Electrical setback, up to 20 drops, add to list, \$12.00. Over 20 drops, add to list, \$24.00. Automatic setback, up to 20 drops, add to list, \$12.80; over 20 drops, add to list, \$25.60. With electrical or automatic setback, add to height of case 1½ inches.

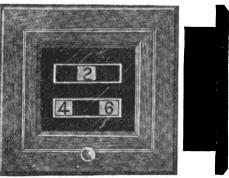
For Lamp Signal Attachment, listed elsewhere, add to list \$6.00. Other sizes and finishes, special—information on request.

Note: Heavy faced type indicates finish supplied when not otherwise specified.

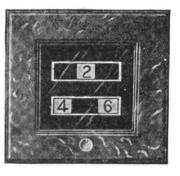
\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

# GRAVITY DROP ANNUNCIATORS

# Standard House Types









# NO. 215 WOOD CASE FLUSH ANNUNCIATOR Schedule "E"

	-*Outside Dimensions-							~•Outside Dimensions-					
No. of Drops	Arr. of Across		Width Inches	Height Inches	Depth Inches	List Price	No. of Drops	Arr. of Across		Width Inches	Height Inches	Depth Inches	List Price
2 3 4	2 3 4	1 1 1	$6\frac{1}{4}$ $6\frac{1}{4}$ $8\frac{1}{4}$	$     6\frac{1}{4}     6\frac{1}{4}   $	$2\frac{1}{2}$ $2\frac{1}{2}$ $2\frac{1}{2}$	\$8.64 10.16 14.08	12 15 18	6 5 6	2 3 3	115/8 101/4 115/8	75/8 101/8 101/8	$2\frac{1}{2}$ $2\frac{1}{2}$ $2\frac{1}{2}$	\$38.40 46.80 52.16
6 8 10	3 4 5	$egin{array}{c} 2 \\ 2 \\ 2 \end{array}$	81/4 81/4 101/4	75/8 75/8 75/8	$2\frac{1}{2}$ $2\frac{1}{2}$ $2\frac{1}{2}$	19.20 25.60 32.00	20 24	5 6	4	10¼ 11¾	$12\frac{3}{8}$ $12\frac{3}{8}$	2½ 2½	62.40 74.88

\*Dimensions given are without trim. For trim, add 3½ inches to height and width. Finish: Filled, varnished and oil-rubbed oak, ash or any ordinary wood. Bell or buzzer not supplied unless ordered, but is furnished without additional charge when specified. For over 24 drops, add per drop \$3.12.

NO. 215-M METAL CASE FLUSH ANNUNCIATOR Schedule "E"

			-*Outs	ide Dime	nsions		-*Outside Dimensions						
No. of	Arr. of	Drops	Width	Height	Depth	List	No. of	Arr. of	Drops	Width	Height.	Depth	List
Drops	Across	Down	Inches	Inches	Inches	Price	Drops	Across	Down	Inches	Inches	Inches	Price
2	2	1	$6\frac{1}{4}$	$6\frac{1}{8}$	$2\frac{1}{2}$	\$10.24	12	6	2	$11\frac{5}{8}$	75/8	21/2	\$47.04
3	3	1	$6\frac{1}{4}$	$6\frac{1}{8}$	$2\frac{1}{2}$	<b>12.9</b> 6	15	5	3	101/4	101/8	21/2	56.40
4	4	1	81/4	61/4	21/2	17.28	18	6	3	115/8	101/8	21/2	67.68
											-		
6	3	2	81/4	<b>7</b> 5⁄8	$2\frac{1}{2}$	23.52	20	5	4	101/4	$12\frac{3}{8}$	21/2	<b>75.20</b>
8	4	2	$8\frac{1}{4}$	<b>7</b> 5⁄8	21/2	31.36	24	6	4	$11\frac{5}{8}$	$12\frac{3}{8}$	$2\frac{1}{2}$	90.24
10	5	2	101/4	<b>7</b> 5/8	$2\frac{1}{2}$	40.64					-	_	

\*Dimensions given are without trim. For trim, add 2½ inches to height and width.

Finish: Brush brass or other ordinary metal finishes. For wood finishes, add to list 25%.

Bell or buzzer not supplied unless ordered, but is furnished without additional charge when specified.

#### Intermediate Sizes Either Style

For intermediate sizes, deduct for No. 215, \$1.36; for No. 215M, \$3.52 per drop from list price of the next larger size listed.

#### Special Finish, Lettering, Setback and Lamp Signal Attachment

Lettering on glass up to 10 letters, list, \$1.04 cents; each additional letter, list, 7 cents. Electrical setback, up to 20 drops, add to list, \$12.00; over 20 drops, add to list, \$24.00. Automatic setback up to 20 drops, add to list, \$12.80; over 20 drops, add to list, \$25.60. With electrical or automatic setback, add to height of case, 1½ inches.

For Lamp Signal Attachment, listed elsewhere, add to list \$6.00.

For special finishes—information on request.

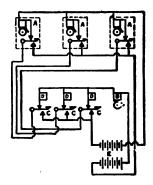
Note: Heavy faced type indicates finish supplied when not otherwise specified.

Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

# GRAVITY DROP ANNUNCIATORS Return Call Type







A - "136 BELL AND PUSH 8 - ANNUNCIATOR BELL C - RETURN CALL BUTTON ON ANNUAL

Wiring Diagram

#### NO. 10 RETURN CALL ANNUNCIATOR

Schedule "E"

This is the standard return call annunciator. The common battery wire is used for both the call from annunciator and to calling point. One wire, with the common return, is for the call from annunciator, the other wire with same common return is for call to annunciator. This type is generally used in hotels for the purpose of calling the room and to permit a signal to be sent from the room, indicating that the call has been heard or the reverse.

Annunciator is equipped with a specially designed built in button with heavy phosphor bronze scrapping contacts, marked the same as the corresponding drop in the annunciator. The drop used is the No. 800 shallow lock gravity type. The No. 136 combination bell and push is the one generally used, but any three-point push and ordinary bell may be substituted if desired.

			Outs	ide Dimer	1810 <b>118</b> —		-Outside Dimensions						
No. of	Arr. of	Drops	Width	Height	Depth	*List	No. of	Arr. of	Drops	Width	Height	Depth	*List
Drops	Across	Down	Inches	Inches	Inches	Price	Drops	Across	Down	Inches	Inches	Inches	Price
6	6	1	$13\frac{1}{4}$	$12\frac{3}{4}$	43/4	\$18.72	24	8	3	16	201/2	43/4	<b>\$</b> 72.96
8	5	2	12	$16\frac{1}{2}$	43/4	<b>24</b> . 96	36	12	3	23	201/2	43/4	106.56
10	5	9	12	161/2	43/4	30.40	40	10	4	20	25	43/4	118.40
12	9	$\tilde{2}$				36.48	50	10	5	20	28¾	43/4	177.60
	6		131/4	161/2	43/4		60	12	5	23	$28\frac{3}{4}$	43/4	148.00
. 15	8	2	$16\frac{1}{8}$	$16\frac{1}{2}$	43/4	45.60	- 00	•	-	0007			000 00
	_	_					80	16	5	$29\frac{3}{4}$	283/4	43/4	<b>23</b> 6.80
20	7	3	$14\frac{3}{4}$	$20\frac{1}{2}$	43/4	61.20	100	20	5	$35\frac{3}{4}$	$28\frac{3}{4}$	43/4	296.00

Dimensions do not include bell on top, for which add 2 inches to the height.

Finish: Filled, varnished and oil-rubbed oak, ash or any ordinary wood.

Wiring diagram sent with each annunciator.

#### Intermediate Sizes

For intermediate sizes, deduct \$3.92 per drop from the list price of the next larger size listed. For larger sizes, add per drop \$2.96.

#### Special Finish, Lettering, and Lamp Signal Attachment

For white enamel finish, add to list:

2 to 12 drops	\$8.00
13 to 24 drops.	9.60
25 to 55 drops	13.60
56 to 100 drops.	

Lettering on glass, up to 10 letters, list, \$1.04; each additional letter, list, 7 cents.

For Lamp Signal Attachment, listed elsewhere, add to list, \$6.00.

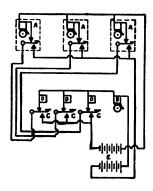
Other finishes, special-information on request.

Note: Heavy faced type indicates finish supplied when not otherwise specified.

\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

# **GRAVITY DROP ANNUNCIATORS** Return Call Type





- 134 BELL AND PUSH Annunciator Bell Return Call Button on Annun

Wiring Diagram

No. 210

"18TH CENTURY" RETURN CALL ANNUNCIATOR No. 210 Schedule "E"

This annunciator has the same internal construction as the No. 10 Return Call type described on preceding page, and operates in the same manner. The case, however, is hand made of specially selected wood, 18th Century design.

	,		0	utside Dimensions		
No. of	Arr. of	Drops	Width	Height	Depth	*List
Drops	Across	Down	Inches	Inches	Inches	Price
6	6	1	131/4	123/4	43/4	\$41.20
8	5	<b>2</b>	12	161/2	434	<b>54</b> .88
17)	5	<b>2</b>	12	$16\frac{1}{2}$	434	66.88
13	6	2	197/8	233/8	51/8	80.20
15	8	2	16	$16\frac{1}{2}$	43/4	99.52
20	7	3	211/4	271/8	$5\frac{1}{8}$	133.76
24	8	3	$22\frac{5}{8}$	<b>27</b> ½	51/8	145.92
<b>3</b> 6	12	3	295%	271/8	51/8	213.12
<b>4</b> 0	10	4	$26\frac{5}{8}$	$30\frac{7}{8}$	$5\frac{1}{8}$	236.80
50	10	5	265/8	$34\frac{3}{8}$	51/8	281.20
60	12	5	$29\frac{5}{8}$	$34\frac{3}{8}$	51/8	337.44
80	16 .	5	355/8	343 <sub>8</sub>	51/8	426.24
100	20	5	415/8	343/8	51/8	532.80

Dimensions do not include the bell on top, for which add 2 inches to height.

Finish: Filled, varnished and oil-rubbed oak, ash or ordinary wood.

Wiring diagram sent with all shipments.

#### Intermediate Sizes

For intermediate sizes, deduct \$4.80 per drop from the list price of the next larger size listed. For larger sizes add per drop, \$5.33.

#### Special Finish, Lettering, and Lamp Signal Attachment

For white enamel, and to list:	
Less than 12 drop.	\$9.60
12 to 24 drop	11.20
25 to 55 drop	16.00
56 drop and larger	19.20

Lettering on glass, up to 10 letters, list, \$1.04; each additional letter, list, \$0.07. For Lamp Signal Attachment, listed elsewhere, add to list, \$7.20. Other finishes special—information on request.

Note: Heavy faced type indicates finish supplied when not otherwise specified. \*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

# GRAVITY DROP ANNUNCIATORS

# Standard Elevator Type





NO. 130, METAL CASE

Schedule "E"

		-Outs	ide Dime	nsions—		Outside Dimensions						
No. of	Arr. of Drops	Width	Height	Depth	*List	No. of	Arr. of I	Props	Width	Height	Depth	*List
Drops	Across Down	Inches	Inches	Inches	Price	Drops	Across I	Oown	Inches	Inches	Inches	Price
3	1 3	45/8	85%	3	\$10.56	10	2	5	$5\frac{7}{8}$	131/8	3	\$30.40
4	1 4	45/8	10 7/8	3	12.80	12	2	6	$5\frac{7}{8}$	$15\frac{3}{8}$	3	36.48
5	1/ 5	45/8	$13\frac{1}{8}$	3	16.00	14 .	2	7	578	$17\frac{5}{8}$	3	42.56
6	1 6	45/8	$15\frac{3}{8}$	3	19.20	16	2	8	$5\frac{7}{8}$	197%	3	48.64
7	1 7	45/8	$17\frac{5}{8}$	3	22.40	18	2	9	$5\frac{7}{8}$	221/8	3	54.72
8	1 8	45/8	$19\frac{7}{8}$	3	24.32	20	2	10	$5\frac{7}{8}$	24 <sup>3</sup> / <sub>8</sub>	3	<b>60</b> .80

Dimensions do not include bell on top, nor reset on the bottom, for which add 31/4 inches to height. Finish: Black Rubber Enamel, brush brass or any ordinary metal finish. For wood finishes add to list 25%.

Not furnished in other arrangement than listed.

For intermediate sizes deduct \$2.40 per drop from list price of next larger size listed. For larger sizes add \$3.04 per drop to list.

Made of sheet steel, perfectly insulated and dust proof. For semaphore types see Nos. 410 and 411.

#### NO. 130D, METAL CASE

Schedule "E"

			Outsi	de Dime	nsions-					-Outsi	de Dime	nsions	
No. of	Arr. of	Drops	Width	Height	Depth	List	No. of	Arr. of	Drops	Width	Height	Depth	List
Drops	Across	Down	Inches	Inches	Inches	Price	Drops	Across	Down	Inches	Inches	Inches	Price
6	2	3	$5\frac{7}{8}$	$8\frac{5}{8}$	3	\$20.24	14	2	7	$5\frac{7}{8}$	$17\frac{5}{8}$	3	<b>\$43.60</b>
8	2	4	$5\frac{7}{8}$	10 1/8	3	25.36	16	2	8	$5\frac{7}{8}$	191/8	3	49.68
10	2	5	$5\frac{7}{8}$	$13\frac{1}{8}$	3	31.44	20	9	10	5 7/8	2436	9	61.84
19	9	e	5½	153/	9	37.52	20	4	10	<i>0</i> ;∕8	44,8	J ,	01.09
12	4	U	078	153/8	ง	31.34							

Dimensions do not include bell on top, nor reset on the bottom, for which add 314 inches to height. Finish: Black Rubber Enamel, brush brass or any ordinary metal finish. For wood finishes, add to list 25%.

Not furnished in other arrangement than listed.

For larger sizes add \$3.04 per drop to list.

Made of sheet steel, perfectly insulated and dust proof.

Separate reset for each vertical row add to list \$12.80.

For semaphore types see Nos. 410 and 411.

#### Special Finishes, Setback, Lettering and Lamp Signal Attachment

For white enamel, add to list: 

Lettering on glass, up to 10 letters, list, \$1.04; each additional letter, list, 7 cents. Electrical setback, up to 20 drops, add to list, \$12.00; over 20 drops, add to list, \$24.00. With electrical setback, add to height of case, 1½ inches.

For Lamp Signal Attachment, listed elsewhere, add to list \$7.20.

Other finishes, special—information on request.

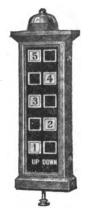
Note: Heavy faced type indicates finish supplied when not otherwise specified.

For "up and down" push buttons for use with elevator annunciators see listing elsewhere.

Delivery F. O. B. New York City. For warehouse deliveries write nearest house.

# **GRAVITY DROP ANNUNCIATORS** Standard Elevator Types





No. 12 Wood Case

No. 12D Wood Case

Schedule "E" NO. 12, WOOD CASE

				Outside Dimension	3	
No. of	Arr. of	Drops	Width	Height	Depth	*List
Drops	Across	Down	Inche <b>s</b>	Inches	Inches	Price
3	1	3	5	93/4	3 .	<b>\$8.16</b>
4	1	4	5	12	3	9.60
5	1	5	5	141/4	3	12.00
6	1	6	5	161/2	3	14.40
7	1	7	5	1834	3	16.80
8	2	4	$6\frac{1}{4}$	12	3	17.92
10	2	5	61/4	141/4	3	22.40
12	2	6	61/4	161/2	3	<b>26.88</b>
14	2	7	61/4	1834	3	31.36
16	2	8	61/4	21	3	35.84
18	2	9	61/4	231/4	3	40.32
20	2	10	61/4	251/2	3	44.80

Dimensions do not include bell on top nor reset knob on the bottom, for which add 31/4 inches to height. Finish: Filled, varnished and oil-rubbed oak, ash or any ordinary wood.

For intermediate sizes deduct \$1.60 per drop from list price of next larger size listed. For larger sizes add per drop to list \$2.24.

For semaphore types see Nos. 410 and 411.

		NO.	12D, WOOD	C <b>ASE</b> Outside Dimension	9	Schedule "E"
No. of	Arr. of	Drops	Width	Height	Depth	*List
Drops	Across	Down	Inches	Inches	Inches	Price
6	2	3	61/4	93/4	. 3	<b>\$</b> 15.44
8	2	4	$6\frac{1}{4}$	12	3	18.96
10	2	5	$6\frac{1}{4}$	141/4	3	23.44
12	<b>2</b>	6	61/4	161/2	3	27.92
14	2	7	$6\frac{1}{4}$	183/	3	32.40
16	2	8	61/2	21	3	<b>36.8</b> 8
18	2	9	$6\frac{1}{4}$	231/4	3	41.36
20	$ar{2}$	10	$6\frac{1}{4}$	$25\frac{1}{2}$	3	45.84
Dime	ngiona do not includ	e hell on ton no	r reget knob on ti	ne bottom for wi	high add 31/	inches to height

Finish: Filled. varnished and oil-rubbed oak, ash or any ordinary wood.

Not furnished in other sizes, or other arrangement than listed.

For semaphore types see 410 and 411.

#### Special Finish, Lettering, Setback and Lamp Signal Attachment For white enamel finish, add to list:

\$6.40 | 13 to 24 drop..... 2 to 12 drop.....

Lettering on glass, up to 10 letters, list, \$1.04; each additional letter, list, 7 cents.

Electrical setback, up to 20 drops, add to list, \$12.00; over 20 drops, add to list, \$24.00.

With electrical setback, add to height of case, 1½ inches.

Other finishes, special—information on request.

For Lamp Signal Attachment, listed elsewhere, add to list, \$7.20.

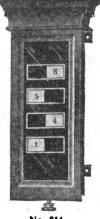
Note: Heavy faced type indicates finish supplied when not otherwise specified.

For "up and down" push buttons for use with elevator annunciators see listing elsewhere.

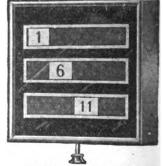
\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

\$8.80

# **GRAVITY DROP ANNUNCIATORS** Shallow Drop Types







No. 816

No. 813

No. 807HV. Metal Case Schedule "E"

NO. 816 CAST METAL CASE ELEVATOR ANNUNCIATOR The 800 Type Drop wound with enameled wire is used in this annunciator.

No. of						
	Arr. of	Drops	Width	Height	Depth	List
Drops	Across	Down	Inches	Inches	Inches	Price
3	1	3	6	103/4	31/8	<b>\$22.08</b>
4	1	4	6	$15\frac{1}{8}$	31/8	22.40
5	· · 1	5	6	$15\frac{1}{8}$	31/8	27.60
6	1	6	6	19	31/4	28.80
7	1	7	6	19	31/4	33.60
8	2	4	7	151/8	31/4	<b>3</b> 8. <b>40</b>
10	2	5	7	151/8	31/4	48.00
12	2	. 6	7	19	31/4	<b>57.60</b>
14	2	7	7	19	31/4	67.20
16	2	8	7	$23\frac{1}{2}$	31/4	76.80
18	2	9	7	231/2	31/4	86.40

Finish: Oxidized copper or plain black. Other finishes supplied at an extra charge. specially designed push button for use with elevators, see other pages following.

For "up and down" push buttons for use with this annunciator see listing elsewhere.

NO. 813 STANDARD RAILWAY ANNUNCIATOR Schedule "E" Metal case finished to match wood or metal trim. Designed particularly for sleeping, dining and

parlor car service.

Bell or buzzer not a part of equipment.

The 800 Type Shallow Drop, wound with enameled wire, is used in this annunciator

	THE GOO TABLE CHARLOW	Diop, wound	MICH CHAMEICH WI	ie, is useu iii i	ms amuniciator.	
10	5	2	9	$5\frac{1}{2}$	$2\frac{1}{2}$	\$37.40
12	6	2	101/2	$5\frac{1}{2}$	$2\frac{1}{2}$	44.88
14	7	2	12	51/2	$2\frac{1}{2}$	52.37
16	8	2	131/2	$5\frac{1}{2}$	$2\frac{1}{2}$	63.84
18	9 .	2	15	$5\frac{1}{2}$	21/2	67.37
20	10 .	· <b>2</b>	161/2	51/2	21/2	73.60
22	11	2	18	$5\frac{1}{2}$	$2\frac{1}{2}$	78.80
24	12	2	191/2	$5\frac{1}{2}$	$2\frac{1}{2}$	82.29
			<del></del>			

NO. 807HV 110 VOLT ANNUNCIATOR

Schedule "E"

Annunciator for 110 volt D.C. service. A metal case with slate back board designed especially for service on the high voltages. Great care is given to the insulation of all current-carrying parts as well as to the elimination of such material as would be affected by heat or moisture. This annunciator is a new departure and will be found dependable.

De anecteu t	by near or moisture.	T IIIIS GI	ununciator is a new	departure and	will be found d	epenuanie.
2	<b>2</b>	•	55/8	$6\frac{1}{8}$	$2\frac{13}{18}$	\$30.80
3	3	1	75%	618	2 <del>11</del>	43.57
4	4	1	75%	$6\frac{1}{8}$	2 <del>! }</del>	<b>53.68</b>
6	3	2	75%	71/3	2 <del>i i</del>	65.57
8	4	2	75%	71/2	213	79.02
10	5 .	$ar{2}$	95%	71/2	211	88.88
12	6	$ar{2}$	11	71/2	211	117.85
15	5	$\bar{3}$	91/4	91/	. 21/2	118.13
18	6	3	103/	91/4	$\frac{1}{2}$	128,45
20	5	4	91/	111%	$\tilde{2}\tilde{1}\tilde{4}$	135.33
24	6	4	1034	111/2	$\bar{2}$ 1/2	149.09

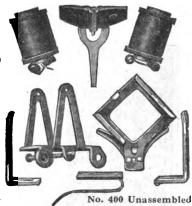
These dimensions do not include reset rod, for which add 1½ inches for reset rod. No bell supplied on case. Finish: Black Rubber Enamel, brush brass or other ordinary metal finishes. Special finish and lettering on glass same as prices on Nos. 12 and 12D Elevator Annunciators. 24 drop and over, add to list per drop.

For intermediate sizes not listed deduct from next larger size, per drop \$3.20.

Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.



**SEMAPHORE** LOCK DROP **ANNUNCIATORS** 



**GENERAL DESCRIPTION** 

This class of drop has been used for many years in places where the indication is to be electrically This class of drop has been used for many years in places where the indication is to be electrically restored. The "Edwards" development should more properly be called an invention, for it only retains the principle of a target electrically operated from one position to another. All of the uncertain and supersensitive balance or magnetic features have been omitted, and there is presented in this drop for the first time a positive, self-locking indication. The action of the drop cannot be affected by vibration, and is capable of taking care of several times the current necessary for operation without injury. The Edwards Lock Semaphore drop (patented) is really the combining of two lock drops in one unit, and does away entirely with the use of permanent magnets. The "position" locking feature of this drop is unique and original. There is nothing flimsy in construction or uncertain in its operation and only the drops that are indicating are in the reset circuit: a hig saving in battery life. All iron parts are protected by electroindicating are in the reset circuit; a big saving in battery life. All iron parts are protected by electro-plating, and magnets are wound with enameled wire, making the most substantial and at the same time simple and positive electric control drop that has ever been produced. The usual manual reset found in gravity or needle type annunciators is omitted, control being entirely electrical.

**OPERATION** Upon energizing the right hand magnet, the shutter is thrown to the left, after which it may be returned to the first position by energizing the left magnet. The front of the annunciator is clear, as all necessary marking appears on white bristol board card carried by the drop. The result is a decided improvement in appearance over types exposing all markings upon the face; in addition it affords a convenient means of changing indications at practically no expense or effort.

### METHODS OF WIRING RESET BUTTONS

None of these annunciators have the old-fashioned reset plungers in the bottom of the cases. The drops are all electrically reset by an ordinary push button. This makes it possible to locate the reset button away from the annunciator, but if specified on order it can be mounted on the annunciator case.

First: An ordinary push button may be located in any convenient place, and by pushing this button all of the drcps that are down in the annunciator will be electrically reset.

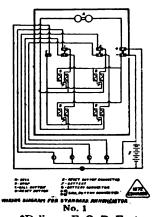
Second: One reset button may be provided for each drop in the annunciator so that any drop may be restored without affecting any other. A system of this kind is splendidly adapted for use in hospitals and other places where general supervision of any kind is desired.

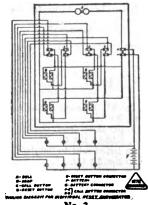
Third: The drops of an annunciator may be divided into two or more groups, each group having its

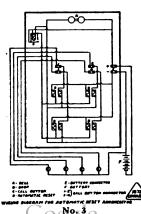
own reset button or buttons. GENERAL

Unless otherwise specified, no push buttons will be supplied with semaphore drop annunciators. For office installations we recommend the use of the Edwards Directory Push No. 190, and, if the wiring is to be in accordance with plan No. 1 shown below, one of the buttons in this push may be used as the reset button. Complete wiring diagram in the back of every semaphore drop annunciator. Schedule "E"

....\*List Price \$2.40 List No. 400 Lock Semaphore Drop......





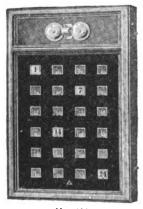


No. 2 For warehouse deliveries write nearest house.

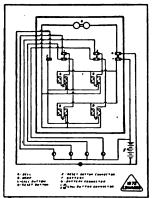
\*Delivery F. O. B. Factory, New York City.

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### SEMAPHORE DROP ANNUNCIATORS



No. 401 Wood



Wiring Diagram



No. 407 Metal

# Surface Type

This is a carefully cabineted case, equipped with the No. 400 Semaphore Lock Drop. When more than 25 drops are to be reset at once, special winding is advisable.

					NO	. 401 W	ood c	ASE				Schedu	ule "E"
			-Outsi	de Dimer	sions—	1	Outside Dimensions						
No. of	Arr. of	Drops	Width	Height	Depth	*List	No. of	Arr. of	Drops	Width	Height	Depth	*List
Drops	Across	Down	Inches	Inches	Inches	Price	Drops	Across	Down	Inches	Inches	Inches	Price
2	2	1	738	$7\frac{3}{4}$	$2\frac{1}{2}$	\$8.80	12	4	3	$11\frac{7}{8}$	$11\frac{3}{4}$	$2\frac{1}{2}$	<b>\$39.36</b>
3	3	1	95/8	734	21/2	10.80	15	5	3	141/8	$11\frac{3}{4}$	$2\frac{1}{2}$	48.00
4	2	2	$7\frac{3}{8}$	$9\frac{3}{4}$	$2\frac{1}{2}$	14.40	18	e	3	163%	113/4	21/2	57.60
6	3	2	$9\frac{5}{8}$	934	$2\frac{1}{2}$	19.68	20	5	Ă	141/8	1334	$\frac{212}{212}$	64.00
8	4	2	$11\frac{7}{8}$	$9\frac{3}{4}$	$2\frac{1}{2}$	26.24	24	6	4	1638	1334	$\frac{212}{212}$	76.80
10	4	3	111/8	1134	$2\frac{1}{2}$	32.80	_ 1	3	-	20/8	10/4	-/2	10.00

For larger sizes, add to list, per drop, \$3.20.

For intermediate sizes, deduct \$2.80 per drop from the list price of the next larger size. Finish: Filled, varnished and oil-rubbed oak or ash, or any ordinary wood.

					NO.	. 407 ME	TAL (	CASE				Schedu	ule "E"
			-Outsi	de Dimer	asions—	1	Outside Dimensions						
No. of	Arr. of I	Orops	Width	Height	Depth	*List	No. of	Arr. of	Drops	Width	Height	Depth	*List
Drops	Across I	Down	Inches	Inches	Inches	Price	Drops	Across	Down	Inches	Inches	Inches	Price
2	<b>2</b>	1	738	73/4	$2\frac{1}{2}$	\$10.40	12	4	3	$11\frac{3}{8}$	111/4	21/4	\$48.00
3	3	1	95/8	73/4	$2\frac{1}{2}$	13.20	15	5	3	$13\frac{5}{8}$	111/4	21/4	57.60
4	2	2	$6\frac{7}{8}$	91/4	21/4	17.60	18	6	2	151/8	111/4	21/	69.12
6	3	2	91/8	91/4	21/4	24.00	20	ğ	4	13 5 8 13 5 8		21/4	76.80
8	4	2	1138	91/4	21/4	32.00	24	6	4		131/4	21/4	
10	4	3 `	113%	111/4	21/4	40.00	24	0	4	151/8	151/4	21/4	92.16

Finish: Black Rubber Enamel, brush brass or ordinary metal finish.

#### General

Automatic Reset: Each indication resets the previous one. Up to 20 drops, add to list \$12.80; over 20 drops, add \$26.50.

For white enamel add to list:

2 to 12 drop...... \$6.40 25 to 55 drop..... \$12.00 13 to 24 drop..... 8.80 56 to 100 drop...... 15.20

Lettering on glass up to 10 letters, list \$1.04, each additional letter, list \$0.07.

For larger sizes, add to list, per drop, \$3.84.
For intermediate sizes, deduct \$3.60 per drop from the list price of the next larger size listed.

For battery lamp signal attachment, add to list \$7.20.

For arrangement of drops other than listed add to list 10%.

For each reset button on case add to list \$2.00.

For buzzer in place of bell add to list \$2.00.

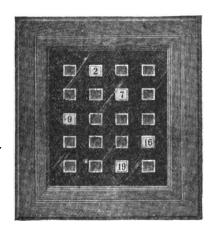
For constant ringing attachment add to list \$6.00.

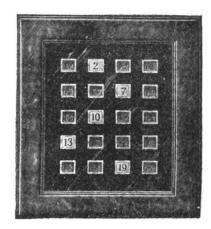
For individual reset arrangement, less button, add to list, per drop, \$0.32.

Note: Heavy faced type indicates finish supplied when not otherwise specified.

\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

# SEMAPHORE DROP ANNUNCIATORS





No. 406 Wood Case

No. 405 Metal Case

### Flush Types NO. 406 WOOD CASE

Schedule "E"

			—Outsi	de Dimer	asions—	í	Outside Dimensions						
No. of	Arr. of	Drops	Width	Height	Depth	*List	No. of	Arr. of	Drops	Width	Height	Depth	*List
Drops	Across	Down	Inches	Inches	Inches	Price	Drops	Across	Down	Inches	Inches	Inches	Price
2	<b>2</b>	1	8	$5^{3}.8$	23/4	<b>\$</b> 9.44	12	4	3	$12\frac{1}{2}$	91/4	21/4	\$43.20
3	3	1	1014	$5^3\mathrm{s}$	23/4	11.76	15	3	5	10 1/4	131/4	21/4	52.80
4	2	2	8	71/4	21/4	15.68	18	3	6	101/4	$15\frac{1}{4}$	21/4	63.36
6	3	2	101/4	714	21/4	21.60	<b>2</b> 0	4	5	$12\frac{1}{2}$	$13\frac{1}{4}$	21/4	70.40
8	4	2	$12\frac{1}{2}$	71/4	21/4	28.80	24	4	б	121/2	151/4	214	84.48
10	4	3	$12\frac{1}{2}$	$9\frac{1}{4}$	21/4	36.00							

These dimensions do not include trim; overlap of trim 1 1/8 inches all around.

Finish: Filled, varnished and oil-rubbed oak or any ordinary wood.

Small bell or buzzer will be furnished inside of case if ordered.

For larger sizes, add to list per dozen \$3.88.

For intermediate sizes deduct \$3.12 per drop from the list price of the next larger size listed.

For each reset button on case, add to list \$2.00.

For constant ringing attachment, add to list \$6.40.

For individual reset arrangement less buttons, add to list, per drop, \$0.32.

					NO	. 405 MI	ETAL (	CASE				Schedu	le "E"
			-Outsi	de Dimer	sions—	1	-Outside Dimension					sions-	
No. of	Arr. of	Drops	Width	Height	Depth	*List	No. of	Arr. of	Drops	Width	Height	Depth	*List
Drops	Across	Down	Inches	Inches	Inches	Price	Drops	Across	Down	Inches	Inches	Inches	Price
2	2	1	8	538	$2\frac{3}{4}$	\$11.04	12	4	3	$12^{3}  \mathrm{s}$	91/2	$2\frac{1}{8}5$	\$1.84
3	3	1	101/4	$5^3$ s	$2\frac{3}{4}$	14.16	15	3	5	1018	$13\frac{1}{8}$	21/8	62.40
4	2	2	71/8	71/8	21/8	18.88	18	3	6	101/8	151/8	21/8	<b>74.88</b> °
6	3	2	101/8	71/8	21/8	25.92	20	4	5	$12\frac{3}{8}$	131/8	21/8	83.20
8	4	2	123/8	$7\frac{1}{8}$	21/8	34.56	24	4	6	$12\frac{3}{8}$	$15\frac{1}{8}$	$2\frac{1}{8}$	99.84
10 -	4	3	$12^{\frac{3}{8}}$	$9\frac{1}{8}$	21/8	43.20							

These dimensions do not include trim; overlap of trim 11/4 inches all around.

For imitation wood Finish: Black Rubber Enamel, brush brass or other ordinary metal finish. finishes, add to list 25%.

Small bell or buzzer will be furnished inside of case if ordered.

### General

Automatic Reset: Each indication resets the previous one. Up to 20 drops, add to list \$12.80; over 20 drops, add \$25.60.

For white enamel, add to list:

25 to 55 drop.....\$12.00 2 to 12 drop...... \$6.40 13 to 24 drop..... 8.80 56 to 100 drop...... 15.20

Lettering on glass up to 10 letters, list \$1.04, each additional letter, list \$0.07.

For larger sizes, add to list. per drop, \$4.16.
For intermediate sizes, deduct \$3.92 per drop from the list price of the next larger size listed.

For battery lamp signal attachment, add to list, \$7.20.

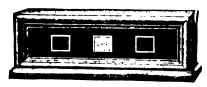
For arrangement of drops other than listed add to list 10%.

Note: Heavy faced type indicates finish supplied when not specified.

\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

# SEMAPHORE DROP ANNUNCIATORS





No. 412 Desk Type



No. 411 Metal Case

No. 410 Wood Case

Elevator Types NO. 410 WOOD CASE

Schedule "E"

	Arrangement —Outside Dimensions—							Arrangement —Outside Dimensions—					
No. of	of Di	ops	Width	Height	Depth	List	No. of	of Ĭ	Props	Width	Height	Depth	List
Drops .	Across	Ďown	Inches	Inches	Inches	Price	Drops	Across	Down	Inches	Inches	Inches	Price
3	1	3	$5\frac{1}{8}$	113/4	21/2	<b>\$</b> 9.36	10	2	5	73/8	$15\frac{3}{4}$	21/2	<b>\$26.40</b>
4	1	4	$5\frac{1}{8}$	$13\frac{3}{4}$	21/2	11.20	12	2	6	73/8	173/4	21/2	31.68
5	1	5	$5\frac{1}{8}$	$15\frac{3}{4}$	21/2	14.00	14	2	7	73/8	1934	21/2	36.96
6	1	6	$5\frac{1}{8}$	$17\frac{3}{4}$	$2\frac{1}{2}$	16.80	16	2	8	73/8	2134	21/2	42.24
7	1	7	$5\frac{1}{8}$	1934	21/2	19.60	18	2	9	73/8	2334	21/2	47.52
8 _	. 2	. 4	73/8	13¾	21/2	21.12	20	2	10	73/8	253/4	21/2	52.80

For larger sizes, add to list \$2.64 per drop. Intermediate sizes not supplied. Finish: Filled, varnished and oil-rubbed oak, ash, or any ordinary wood.

For "up and down" push buttons to use with elevator annunciator see listing elsewhere.

					NO	. 411 ME	ETAL (	CASE			2	schedu	ıle "E"
	Arrangement —Outside Dimensions—						Arrangement —Outsid			le Dimensions—			
No. of	of Dr	ego	Width	Height	Depth	List	No. of	of I	Örops	Width	Height	Depth	List
Drops	Across	Down	Inches	Inches	Inches	Price	Drops	Across	Down	Inches ·	Inches	Inches	Price
3	1	3	45/8	111/4	$2\frac{1}{4}$	\$11.76	10	2	5	$6\frac{7}{8}$	151/4	21/4	\$34.40
4	1	4	45/8	131/4	21/4	14.40	12	2	6	61/8	171/4	21/4	41.28
5	1	5	45/8	$15\frac{1}{4}$	21/4	18.00	14	2	7	67/	191/4	21/	48.16
•		^	457	1717	01/	04 30		_	(	67/8		21/4	
б	1	ь	45/8	171/4	$2\frac{1}{4}$	21.60	16	2	8	$6\frac{7}{8}$	211/4	23/8	55.04
7.	1	7	45/8	191/4	21/4	25.20	18	2	9	$6\frac{7}{8}$	$23\frac{1}{4}$	23/8	61.92
<b>.</b> 8	2	4	67/8	131/4	21/4	27.52	20	2	10	67/8	251/4	23/8	68.80

For larger sizes, add to list \$3.44 per drop. Intermediate sizes not supplied.

Finish: Black Rubber Enamel, brush brass or any ordinary metal finish. For imitation wood

finishes, add to list 25%.

For "up and down" push buttons to use with elevator annunciator see listing elsewhere.

-			ASE DESK TY	PES, PORTAB	LE	Schedule "E"
No. of	Arr. of	Drops	Width	Height	Depth	List
Drops	Across	. Down	Inches	Inches '	Inches	Price
2.	2	1	73/4	33/8	23/4	\$16.00
3	3	1	10	33/8	23/4	17.92
4	4	1	121/4	33/8	23/4	21.06
5	5	1	141/2	33/8	23/4	<b>24</b> .19
6	6	. 1	163/4	33/8	23/4	<b>27</b> .33
8	8	1	211/4	33/8	23/4	33.60
Large	er sizes, prices specia	al.				
Fini	h: Filled, varnished	d and rubbed oa	k, ash or any or	dinary wood.		
For b	oattery lamp signal	attachment, add	l to list, \$7.20.	-		

..... \$8.80

For white enamel finish, add to list:

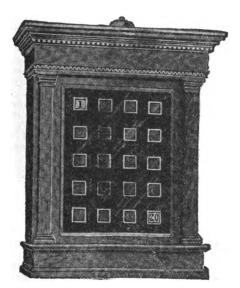
2 to 12 drops......\$6.40 13 to 24 drops......

Lettering on glass up to 10 letters, list \$1.04, each additional letter, list \$0.07.

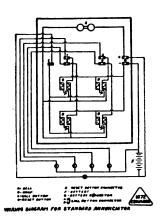
Note: Heavy faced type indicates finish supplied when not otherwise specified.

\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

# SEMAPHORE DROP ANNUNCIATOR



No. 413



# 18th Century No. 413

Schedule "E"

A hand cabineted case representing the highest art of the skilled mechanic. The greatest attention is given to every detail in order to produce a perfect reproduction of the best available design of the period. A massive, splendidly proportioned case, harmonizing perfectly. Control is entirely electrical and any number of reset buttons may be used. It can be used as a master instrument in multiple with smaller outlying annunciators. The Edwards Lock Semaphore Drop is used, and every possible effort has been made to produce the highest class annunciator that it is possible to produce. A beautiful hand polished finish is given in any desired wood. Oak will be supplied unless otherwise specified.

Drops	Across	Down	Width	Height	Depth	List Price	Drops	Across	Down	Width	Height	Depth	List Price
<del>6</del> 8	3 4	$_2^2$	$16\frac{1}{2}$ $20\frac{3}{4}$	$\frac{20\frac{1}{8}}{18\frac{1}{2}}$	$\frac{6}{4\frac{3}{8}}$	\$40.80 51.20	<b>3</b> 6 <b>40</b>	6 10	6 4	2514	$26\frac{1}{2}$ $25\frac{5}{8}$	$\frac{434}{6}$	\$144.00 160.00
10	4	3	$20\frac{3}{4}$	$20\frac{1}{2}$	434	60.00	50	10	5	$25\frac{1}{2}$ $25\frac{1}{2}$	$\frac{25\%}{285\%}$	6	212.00
12	4	3	2034	$20\frac{1}{2}$	43/4	67.20							
15 20	5 <b>5</b>	3 4	$\frac{23}{23}$	$\frac{20\frac{1}{2}}{22\frac{1}{2}}$	43/4 43/4	78.00 104.00	60 80	10 10	6 8	341/4	261/2	434	230.40
20	9	*	20	2272	474	104.00	80	10	0	$34\frac{1}{4}$	$30\frac{1}{2}$	43/4	<b>275.20</b>
24	6	4	$25\frac{1}{4}$	$22!_2$	434	115.20	100	10	10	$34\frac{1}{4}$	$34\frac{1}{2}$	43/4	<b>344.0</b> 0

For intermediate sizes, deduct \$2.00 per drop from the list price of the next larger size listed.

For larger sizes, add per drop \$3.44.

Lettering on glass, up to 10 letters, list \$1.04; each additional letter, list \$0.07.

For Lamp Signal Attachment, listed elsewhere, add to list \$7.20.

Note: Heavy faced type indicates finish supplied when not otherwise specified.

Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house,

For each reset button mounted on case, add to list \$2.00.

For individual reset arrangement, less button, add to list, per drop, \$0.32. Google For constant ringing attachment, add to list \$5.00.

# VEHICLE CALL ANNUNCIATOR

# AND

# Whitlock Illuminated Porch and Exit Fixtures



Vehicle Call

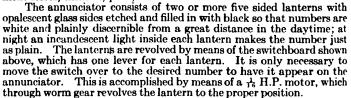


Switchboard

# Edwards Vehicle Call System

An orderly, dignified and efficient means of signaling chauffeurs and coachmen who are waiting for their passengers at hotels, clubs, department stores thereon piers at

ment stores, theaters, piers, etc.



The case is sheet steel, so designed that ornamental covering case to

match design of building may be put over it.

The switchboard is a slate box with heavy brass front and arranged

for flush or surface mounting.

The annunciator with two lanterns gives 25 different numbers; three lanterns give 125 numbers; four lanterns give 625. They are supplied to show the same number from two sides or one, and with figures from 12 to 18 inches high.

Special "vehicle call" bulletin gives complete description of the system and its operation. We will be glad to furnish prices on request.





Porch Number

# EXIT



Showing Method of Installing Porch and Exit Fixtures

#### Whitlock Illuminated Porch Numbers

Li	st Price
Description	Each
Porch number complete for globe with 3½ in. ring, with up to or including five figures and necessary blank	
spacers	<b>\$</b> 4.00
Porch number complete for globe with 4 in. ring, with up	
to or including five figures and necessary blank spacers	4.00
Opalescent white glass, 25% x 9 ins	.27
Figures 0 to 9, $1\frac{7}{8}$ ins. wide x $2\frac{1}{2}$ ins. high	. 13
Full blank spacer, 1% ins. wide x 21% ins. high	. 13
Half blank spacer, 12 in. wide x 2½ ins. high	.11
Third blank spacer, 15 in. wide x 21/2 ins. high	.07
	Description  Porch number complete for globe with 3½ in. ring, with up to or including five figures and necessary blank spacers.  Porch number complete for globe with 4 in. ring, with up to or including five figures and necessary blank spacers Opalescent white glass, 2½ x 9 ins.  Figures 0 to 9, 1½ ins. wide x 2½ ins. high.  Full blank spacer, 1½ ins. wide x 2½ ins. high.  Half blank spacer, ½ in. wide x 2½ ins. high.

#### Whitlock Illuminated Exit Fixtures

	William Illuminated Date I incure	•
List	Li	ist Price
No.	Description	Each
1208	Exit fixture complete for globe with 3¼ in. ring, with slide reading EXIT	<b>\$</b> 5.60
1209	Exit fixture complete for globe with 4 in. ring, with slide reading EXIT.	5.60

Prices do not include glass globe or lamp.

Delivery F. O. B. New York City. For warehouse deliveries write

nearest house.

n E

12

# BRYANT SILENT CALL SIGNAL SYSTEM

The Bryant Silent Call Signal System is a simplified lamp signal system designed particularly for use in hospitals and having use also in offices, department stores, public buildings, etc.

It requires no relays, no batteries no motor generators, no transformers, and operates direct on 100 to

125 volts direct or alternating current.

The slightest pressure on the button of a bed push indicates a desire for attendance, which is registered by means of incandescent lamps lighting simultaneously at various points—outside the room or ward door, at the nurse's desk, in the diet kitchen and elsewhere if desired.

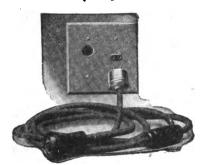
The registration of a call may also be indicated to the patient by the means of an illuminated bulls-eye included as a part of the calling station at the bedside. All the signal lamps incident to a given call remain lighted and cannot be changed until reset by the attendant at the calling station by the bedside where the call originated.

A calling station may be confined to the receptacle and cord extension with bed push and control switch, or may include the bulls-eye and one or more outlets for examination light, reading lamp, fan,

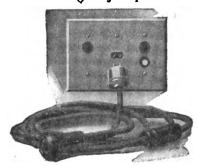
heating pad, etc.

The system is permanent positive with minimum maintenance.

For convenience each section of the various stations has been given a letter designation, as shown above the illustration. ..o..

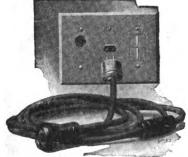


No. 10 Calling Station

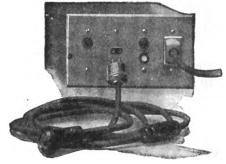


No. 11 Calling Station

*List	Frivate Room Calling Stations	List Price Each
10	Calling Stations "Q," "J" includes: 1 control switch, 1 receptacle for cord extension to be push, 1 bed push button with 8 feet of special signal cord and plug	i . \$18.56
11	It requires a standard two gang outlet box not less than 2¾ inches deep.  Calling Station "Q," "J," "P" includes: 1 control switch, 1 receptacle for cord extension to	<b>o</b> .
	bed push, 1 bed push button with 8 feet of special signal cord and plug, 1 double pole push button emergency switch.	n
	It requires a standard three-gang outlet box not less than 2% inches deep.	
	"Q" "J" "P" "D"	



No. 12 Calling Station



No. 13 Calling Station

List Price

No.	i iivate koom Caning Stations	Each
12	Calling Station "Q," "J," "D" includes: 1 control switch, 1 receptacle for cord extension to	
	bed push, 1 bed push button with 8 feet of special signal cord and plug, 1 receptacle for plug	
	extension to examination light, fan, heating pad, etc	<b>e</b> on on
	the state of the s	<b>#</b> 20.00
	It requires a standard three-gang outlet box not less than 234 inches deep.	
13	Calling Station "Q," "J," "P," "D" includes: 1 control switch, 1 receptacle for cord exten-	
	sion to bed push, 1 bed push with 8 feet of special signal cord and plug, 1 double pole push	
	button emergency switch, 1 receptacle for plug extension to examination light, fan, heating	
	ned etc	\$22 40
	It requires a standard four gang outlet hav not less than 23% inches door	<b>4</b> 22.40
	10 requires a standard four-gaing outlier box not not sess than 272 menes deep.	
	pad, etc	
	Delivery F. O. B. Factory, Bridgeport, Conn. For warehouse deliveries write nearest house.	
	90 1 Planet at 37 and 57	

Private Room Calling

# BRYANT SILENT CALL SIGNAL SYSTEM

Ward Calling Stations. The ward calling stations are designed for use in rooms where several beds are placed. They are similar to private room calling stations, except that a bulls-eye signal lamp has been added to enable the responding attendant to locate the exact origin of the call. They may also be used in private rooms when it is desired that registration of the call be indicated to the patient. The equipment includes a two candle lamp behind each bulls-eve.



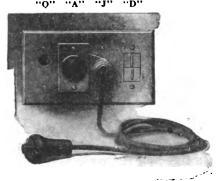
No. 14 Ward Calling Station



No. 15 Ward Cailing Station

# Ward Calling Station

List Price \*List No. Each Outfit "Q," "A," "J" includes: 1 control switch, 1 receptacle for cord extension to bed push, 1 bed push button with 8 feet of special signal cord and plug. 1 bulls-eye signal..... \$22.06 It requires a standard four gang outlet not less than  $2\frac{3}{4}$  inches deep. 15 Outfit "Q," "A," "J," "P" includes: 1 control switch, 1 receptacle for cord extension to bed push, I bed push button with 8 feet of special signal cord and plug, I bulls-eye signal, I double pole emergency push button switch..... It requires a standard four gang outlet box not less than 234 inches deep.



No. 16 Ward Calling Station

\*List



No. 17 Ward Calling Station

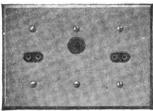
List Price

# Ward Calling Station

No.	Each
Outfit "Q," "A," "J," "D" includes: 1 control switch, 1 receptacle for cord extension to bed push, 1 bed push button with 8 feet of special signal cord and plug, 1 bulls-eye signal, 1 receptacle for plug extension to examination light, fan, heating pad, etc	<b>\$24.70</b>
Outfit "Q," "A," "J," "P," "D" includes: 1 control switch, 1 receptacle for cord extension to bed push, 1 bed push button with 8 feet of special signal cord and plug, 1 bulls-eye signal, 1 double pole push button emergency switch, 1 receptacle for plug extension to examination light, fan, heating pad, etc	\$25.90
Delivery F. O. B. Pactory, Bridgeport, Conn. For warehouse deliveries write nearest house.	
Flactrical House Coods and Novelties 11-2	

16

# MISCELLANEOUS APPARATUS



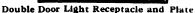
No. 10 Station for Two Beds

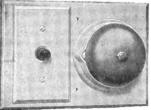
361906



Single Door Light Receptacle and Plate







Signal for Night Calls

### One Station for Two Beds

One station for two beds can be effected by having a plug section at each end of the station plate. For this feature add \$1.05 to any of the described stations listed. PUSH BUTTON AND CORD List No. Mfr. No. 361905 478 Extra button.....each \$4.20

Pilot Lamp and Door Lamp RECEPTACLES AND PLATES

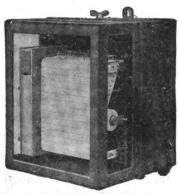
Extra cord......per foot

The door signal lamp consists of any Edison base receptacle and lamp situated above the door on the corridor side of the room from which the call originates, and enables the nurse to readily locate the room from which the call is sent.

List No.	rice Each
361883 Single door light receptacle and plate. (Requires 1 gang switch box)	<b>\$</b> 1.12
361884 Double door light receptacle and plate. (Requires 2 gang switch box)	2.24
361885 Three pilot light receptacle and plate. (Requires 3 gang switch box)	3.36
361886 Four pilot light receptacle and plate. (Requires 4 gang switch box)	4.48

Audible Signal for Night Calls

A single stroke bell for night service with a cut-off switch. It requires for its installation a standard 3 gang switch box. 361887 Audible signal for night call..... \$14.00







Lamp Annunciator

Elapsed Time Recorder

This is an automatic device that makes a graphic record of the time each call is registered and the time elapsing before it is answered. Each recorder registers calls from 20 calling stations located in any part of the building. Each recorder is equipped to accommodate 20 stations. They may also be equipped for as many stations from 1 to 20 as desired. Automatic recorder capacity 20 stations..... 361888

•		Cand	elabra E	Base I	Lamp	Ann	unciator		
List	Annun-	Size of Box	Size of Trim	List	List	Annun-	Size of Box	Size of Trim	List
No.	ciator	Inches	Inches	Price	No.	ciator	Inches	Inches	Price
361889	2	61/4 x 43/4 x 45/8	$8\frac{1}{4} \times 6\frac{3}{4}$	\$17.50	361897	24	$9\frac{1}{4} \times 12\frac{1}{4} \times 4\frac{1}{2}$	111/4 x 141/4	\$119.00
361890	4	614 x 614 x 45%	$8\frac{1}{4} \times 8\frac{1}{4}$	31.50	361898	28	$9\frac{1}{4} \times 13\frac{3}{4} \times 4\frac{5}{8}$	$11\frac{1}{4} \times 15\frac{3}{4}$	140.00
361891	6	$6\frac{1}{4} \times 7\frac{3}{4} \times 4\frac{5}{8}$	$8\frac{1}{4} \times 9\frac{3}{4}$	42.00	361899	32	914 x 1514 x 45%	1114 x 1714	161.00
361892	8	614 x 914 x 45%	81/4 x 111/4	52.50	361900	36	$9\frac{14}{4} \times 16\frac{34}{4} \times 4\frac{54}{8}$	11 1/2 x 1837	175.00
361893	10	614 x 1034 x 45%	$8\frac{1}{4} \times 12\frac{3}{4}$	70.00	361901	40	914 x 1814 x 45%	111/4 x 201/4	196.00
361894	12	614 x 1214 x 45%	814 x 1414	73.50	361902	44	914 x 1934 x 456	$11^{17} \times 21^{37}$	213.50
361895	16	914 x 914 x 45%	11 1/2 x 11 1/2	87.50	361903	48	914 x 2114 x 456	1114 x 2314	234.50
361896	20	9 14 x 10 34 x 4 54	11 1/2 x 12 3/2	101.50		52	914 x 2234 x 45%	111/4 x 243/	254 80

Note: When ordering, state finish of fronts. List prices cover white enamel and brush brass. An extra charge will be made for other finishes. Also state markings or numbering desired.

Prices and dimensions of lamp annunciators include candelabra base receptacles and 34 inch bulls-eye,

but do not include lamp. Prices on application.

Delivery F. O. B. Factory, Bridgeport, Conn. For warehouse deliveries write nearest house.

### **BURGLAR ALARM APPARATUS**

#### GENERAL DESCRIPTION

This apparatus is manufactured for entire protection against intrusion of any sort, and it includes complete equipment necessary for installation with the exception of wire and battery. It comprises burglar alarm annunciators, alarm bells, window, door, shade, transom, shutter and scuttle springs, switches and automatic house-lighting devices. The interchangeability of these devices permits unlimited flexibility for the system; it will be found invaluable for private houses and apartments, suburban homes, institutions, poultry farms, large estates, stores, etc.

#### **OPERATION**

At a given time the system is placed in effect, either wholly or in part, by the arrangement of switches at the annunciator, where A "silent test" switch assures the user that all desired openings are under protection. There is also a switch to test bell and line; and one to test battery and line. If now, an entrance is attempted, a bell at any desired point gives the alarm and the point of entrance is indicated. Additional bells or any form of signals or indication may be added to the equipment, to be placed at any point on the premises or at a remote point, or the instrument may be so arranged as to cause the entire house or individual lights, to become illuminated when an alarm is given, or all of these features may be included.

Certain sections, such as coal chute, wine cellar or scuttle, may be left permanently connected by placing switches for these sections on the upper, or day, bar. Selected portions, such as the servants' quarters and other parts of the house to be used before the family arises, may be automatically disconnected upon the ringing of a servants' call by placing the switches for those sections on the lower, or

night, bar.

Correspondence regarding special usage of burglar alarm application is invited.

#### CONSTRUCTION

These instruments are of standard construction and design, as described elsewhere. In such styles as call for them, high grade clock movements are installed. Switch bars for night and day connection and testing circuits are included. Alarm bells recommended are the Recti and the Lungen. See also constant ringing attachments, small bells, and entrance door springs, lock switches, etc.

EXTRA ATTACHMENTS	Schedule "E"
For No. 3, No. 4, or No. 5 Burglar Alarms.	*List Price
Automatic gas lighter, one or two burners	\$18.40
Automatic gas lighter, more than two burners, per burner	4.00
Automatic incandescent lamp lighter, in case, capacity 10 amps	64.00

#### AUTOMATIC CLOCK BURGLAR ALARM NO. 3 Schedule "E"



Equipment—Fine 8-day clock, servants' call, voltmeter, bell, battery and silent tests, constant ringing switch, and automatically illuminated dial if ordered. Extra attachments, as listed above.

Finish—Oak or any ordinary wood, filled, varnished and rubbed; beveled plate glass door with lock. Surface or flush types furnished. Prices and dimensions given are for surface types; other styles on request.

	Arrange-	Ou			
No. of Sections	ment Rows	Width Inches	Height Inches	Depth Inches	<b>*List</b> Price
6	1	14	23	73/4	\$344.00
8	1	17	23	73/4	360.00
10	1	19	23	73/4	376.00
10	2	121/4	27	73/4	376.00
12	2	14	27	73/4	392.00

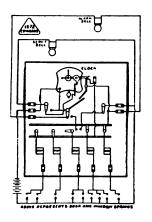
Additional sections in width, add to width, 11/2 inches. Additional rows in height, add to height, 4 inches. Additional sections, add to list per section, \$9.20. For white enamel finish, add to list, \$12.00.

Note: Heavy face type indicates finish supplied when not otherwise ordered.

Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

# BURGLAR ALARM APPARATUS







No. 5

# Annunciator Burglar Alarms

AUTOMATIC CLOCK BURGLAR ALARM NO. 4

Schedule "E"

Equipment: Fine 8-day clock. Servants' call, battery, bell and silent test, constant ringing switch. Extra attachments, as listed on preceding page.

Finish: Same as No. 3. Other finishes and flush types furnished. Prices and dimensions given are

for surface types.

			-Outside Dimensions		
No. of Sections	Arrangement Rows	Width Inches	Height Inches	Depth Inches	*List Price
6	1	131/4	23	73/4	\$160.00
8	1	16	23	73/4	176.00
10	1	183⁄4	23	$7\frac{1}{2}$	192.00
10	2	12	$26\frac{3}{4}$	73/4	192.00
12	2	131/4	26¾	73/4	210.00

Additional sections in width, add to width,  $1\frac{1}{2}$  inches. Additional rows in height, add to height, 3% inches.

Additional price per section, list, \$7.20. For white enamel finish, add to list, \$12.00.

#### **AUTOMATIC CLOCK BURGLAR ALARM NO. 5**

Schedule "E"

Equipment: Standard 8-day long pendulum clock. Battery, bell and silent test, constant ringing switch. Extra attachments, as listed on preceding page.

Finish: Same as No. 3 but without glass door. Other finishes and flush types furnished. Prices and

dimensions shown are for surface types.

Outside Dimensions					
No. of Sections	Arrangement Rows	Width Inches	Height Inches	Depth Inches	*List Price
6	1	131/4	24	61/4	<b>\$96.00</b>
š	î	16	$\overline{24}$	614	104.00
10	1	18	24	61/4	112.00
10	2	12	271/2	61/4	112.00
12	2	131/4	$27\frac{1}{2}$	61/4	120.00

Additional sections in width, add to width, 1½ inches. Additional rows in height, add to height, 31/2 inches.

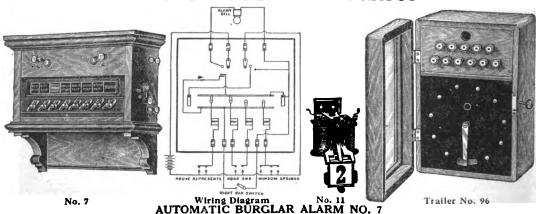
Additional price per section, list, \$4.80.

Servants' call can be furnished at an additional list price of \$12.00.

For white enamel finish, add to list. \$9.60.

\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

# **BURGLAR ALARM APPARATUS**



Furnished with battery, bell an I silent tests.

Schedule "E"

				<del></del>		
No. of	Arrangement	Width	Height	Depth		*List
Sections	Rows	Inches	Inches	Inches		Price
6	1	131/4	141/2	$6\frac{1}{4}$		<b>\$</b> 61.60
8	1	16	141/2	$6\frac{1}{4}$		<b>65</b> .98
10	1	1834	141/2	61/4	-	70.37
10	${f 2}$	113/4	181/4	$6\frac{1}{4}$		70.37
12	<b>2</b>	131/2	181/4	$6\frac{1}{4}$		74.72

Additional rows in height, add to height, 3% inches. Additional sections in width, add to width, 11% inches. Add to price per section, \$4.58.

Finish: Filled, varnished and rubbed oak.

Special Finish, Lettering and Setback

Note: Heavy face type indicates finish supplied when not otherwise specified. For mahogany, add to list, 25%. For white enamel finish, add to list:

2 to 12 Section \$4.90 13 to 24 Section \$6.40 25 to 55 Section \$9.60 56 56 to 100 Section \$11.20

Lettering on glass, up to 10 letters, list, 95 cents; each additional letter, list, 7 cents.

CLOSED CIRCUIT DROP NO. 11 Schedule "E"

For annunciators or burglar alarms on closed circuit, each drop acting as its own relay.

\*List Price-

With Clock Without Clock \$116.00 **\$56.00** For 6-section cases..... 80.00 140.00 For 8-section cases ..... 104.00 164.00 For 10-section cases.....

For larger sizes, prices furnished on application. For annunciators all styles except fire alarm, return call or the No. 81, special prices on application.







\$6.72

Schedule "E" A spring operated clock movement causes arm to rotate, closing contact by means of brush at end of arm wiping over the points in

succession. It is used when a number of bells are to be operated, so that battery economy may be effected or where needed current for proper operation of all bells at once would be so high as to be unadvisable. It can be supplied for any number of circuits. List No. \*List Price Each

96 2 to 6 points... **\$**36.00 Extra points, add to list, for each point, \$1.40.

LOCK BURGLAR ALARM SWITCHES

Schedule "E" The No. 95 switch is placed on the outside of door frame, so that when burglar alarm is set, persons

that after switch has been turned off outside, key can be withdrawn and person entering can close the door. insert key on inside and reset switch.

95A so that it cannot be removed from the outside.

Electrical House Goods and Novelties

# BURGLAR ALARM ACCESSORIES

# Open and Closed Circuit Springs

Open Circuit Window Springs: Nosing in normal position, contact is broken. Closed Circuit Window Springs: Nosing in normal position, contact is established. Door Springs are just the reverse.

Note: In installing window springs, one should be placed in the frame several inches above the lower end of the upper sash, and one a similar distance below the upper end of the lower sash. Each sash should be mortised so the nosing will set in the recess when the window is closed, and this mortise should be continued above the upper, and below the lower spring a few inches to permit the opening of the window for ventilation. When the sash is moved beyond that point, it depresses the nosing, making or breaking (as the system is open or closed circuit) the circuit.

Where the sash is lose, the use of the No. 121 counter spring mounted on the side of the frame opposite to the window spring points and this increase should be window.

to the window spring will insure satisfactory results.

All spiral and contact springs are phosphor bronze metal. The contacts are rubbing or scraping.











No. 30 OPEN CIRCUIT SPRINGS

No. 32 Schedule "E"

List No.	For Use On	Description	Size of Plate Inches	Std. Pkg.	*List Price
28	Window		$2\frac{3}{8} \times \frac{1}{2}$	90	\$0.44
29	Window	Double	$1\frac{1}{2} \times 1\frac{3}{4}$	12	.69
30	Window	Heavy contact		60	.69
31	Shade	Perpendicular for under sill		12	
32	Transom	For French or nivot windows	21/4 x 1	12	1 21











No. 38

OPEN CIRCUIT SPRINGS

Schedule "E"

List			Size of Plate	Std.	*List
No.	For Use On	Description	Inches	Pkg.	Price
34	Door		2 x 5/8	90	\$0.32
35	Door or Transom	For hinged transoms or thin doors	15/8 x 1/2	50	.31
36	Door	Extra heavy		12	.63
37	Shutter	Extra long break	$3 \times \frac{5}{8}$	12	.81
38	Door	Make and break	$2 \times \frac{5}{8}$	90	.42

The make and break spring No. 38 differs from other types in that it establishes the contact as the door opens and closes, but not when the door is open or closed. It is used for store doors and other places where a signal that a door is being opened or closed is desired and yet permit the door to remain in either position without ringing the bell.

Note: Assortment of all springs listed above to make standard package is permitted if the total number ordered equals the largest standard package quantity of the styles ordered.

Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

# **BURGLAR ALARM SPRINGS** Open and Closed Circuit Springs

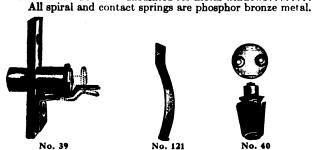








	113	No. 120 No.	. 138		No.	143 -
		OPEN CIRCUIT SPI		Sche	dule "E"	
	For Use On	Description		Size of Plate	Std. Pkg.	*List Price
113	Door	Insulated for metal doors		$2 \times \frac{5}{8}$ ins.	6 .	\$5.40
1 <b>2</b> 0	Window	Roller for swinging frames		$3\frac{3}{4} \times 1\frac{1}{4}$ ins.	6	3.15
138	Shade	For top of sill				.96
143	Window	Insulated for metal windows				3.15



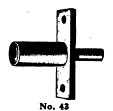






No. 42

-		CLOSED CIRCUIT SPRINGS		Sche	dule "E"
List No.	For Use On	Description	Size of Plate	Std. Pkg.	*List Price
28	Window		$2\frac{3}{8}$ x $\frac{1}{2}$ in.	90	<b>\$</b> 0.61
30	Window	Heavy spring			.79
31	Shade	Perpendicular for under sill	$1\frac{7}{8} \times \frac{5}{8}$ in.	12	1.44
36	Door	Extra heavy			.72
37	Shutter	Extra long break	$3 \times \frac{5}{8}$ in.	12	1.08
39	Door	Opening door breaks contact	$2 \times \frac{5}{8}$ in.	90	.42
121	Window	Flat contact or for loose sash	$4\frac{1}{2} \times \frac{3}{4}$ in.	6	.36
40	Door or Safe	Fits 3/8 inch hole (price with plate)	$1\frac{3}{4} \times \frac{5}{8}$ in.	6	.54
40	Door or Safe	Plate only			.18
41	Door or Safe	Price with plate	$1\frac{3}{4} \times \frac{5}{8}$ in.	6	.63
42	Door or Safe	Price with plate	$1\frac{3}{4} \times \frac{5}{8}$ in.	6	.54











		CLOSED CIRCUIT SPRINGS		Sche	dule "E"
List No.	For Use On	Description	Size of Plate	Std. Pkg.	*List Price
43	Door or Safe	Long break, with plate	$1\frac{3}{4} \times \frac{5}{8}$ in.	6	<b>\$0</b> .63
44		With extra plate No. 44a			.63
44A	Door or Safe	Extra plate only	$1\frac{3}{4} \times \frac{5}{8}$ in.	6	.18
For	package assort	ment on above see foot-note on preceding page.			
DOOR TRIP NO. 236					dule "E"
To	automatically r	ing bell when door is opening. Screws to door fra	me.		

236 Door Trip..... \$0.90 BURGLAR ALARM ATTACHMENT NO. 45
For protecting windows, skylights, blinds, etc.

A wire attached to the ring is drawn so as to break the contact. The further drawing of the wire, or the breaking of it, will establish a contact and give the alarm. \$1.35 \*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

#### RECORDING SYSTEM

#### Watchman's Time Detectors



No. 75

Utility: The Edwards' Time Detectors are used extensively in industrial plants, department stores, warehouses, hotels, institutions, yards, docks, steamships, etc., to record accurately and indelibly the exact time of each visit of the watchman at each essential point of his rounds, at which point a station is placed.

Operation: At the station, the watchman is required to insert a special form of key and a perforation is then made by electrical contact, either with the use of a magneto or by means of a battery circuit upon a central dial, the movement of which is operated in connection with an 8-day clock. The dial passes through guides preventing wrinkling, which might cause inaccuracies or interfere with the clock mechanism.

Construction: Metal parts are brass or bronze except where steel is necessary; this is copper plated or japanned. Wire connections are soldered. All connectors are marked to facilitate installation and test. Each instrument is equipped with lock and key and the opening of the door is recorded on the dial. Automatic cutout device is added to battery type to prevent the dial from mutilation through prolonged contact. This is not necessary with the magneto types.

Underwriters' Approval: Edwards' Time Detectors of the magneto type are inspected and approved by the National Board of Fire Underwriters, while battery type systems irrespective of make are without this approval; both types show every deviation from the exact performance of the watchman's duty.

Insurance Rates: The increased measure of security from fire risk obtained through their use has resulted in a substantial reduction in fire insurance rates.

The prices given include a year's supply of dials, but do not include magneto or battery stations.

#### MAGNETO TYPE NO. 75

Schedule "E"

With	Time	piece

No. Stations	———Dimensions——— High Inches	Wide Inches	Deep Inches	<b>*List</b> Price
4	313/4	171/2	51/2	\$153.30
5	$31\frac{3}{4}$	171/2	$5\frac{1}{2}$	160.60
6	$31\frac{3}{4}$	171/2	$5\frac{1}{2}$	160.60
7	31 3/4	$17\frac{1}{2}$	$5\frac{1}{2}$	167.90
8	$31\frac{3}{4}$	171/2	$5\frac{1}{2}$	167.90
9	$31\frac{3}{4}$	171/2	$5\frac{1}{2}$	175.20
10	$31\frac{3}{4}$	171/2	$5\overline{1/2}$	<b>175.20</b>
12	31 3/4	17 1/2	$5\overline{1/2}$	182.50
15	3134	$17\frac{1}{2}$	$5\frac{1}{2}$	193.45
20	$35\frac{1}{2}$	211/4	51/2	211.70
25	$35\frac{1}{2}$	21 1/4	$5\frac{1}{2}$	<b>230</b> .52

Extra stations, per station up to 50, list \$5.94.

Standard finish, oak.

For white enamel, add to list \$10.95.

Where more than 25 stations are required, 2 recording dials will be used.

		BATTERY TYPE NO	. 97	Schedule "E"
	Four State	ions, With Timepiece	in Same Case ·	
No.	High	Wide	"Deep	*List
Stations	Inches	Inches	Inches	Price
4	313/4	171/2	51/2	\$185.40

Prices do not include stations.

Other sizes same price and dimensions as No. 75.

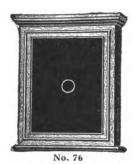
PAPER DIALS ONLY	Schedule "E"
For all types of watchman's time detectors listed above.	
1 to 10 stations, per 1000	\$14.60
11 to 15 stations, per 1000	
16 to 20 stations, per 1000	21 90

\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

21 to 25 stations, per 1000.....

24.34

## TIME DETECTOR AND STATIONS



## Watchman's Time Detector

**MAGNETO TYPE NO. 76** Without Timepiece

Schedule "E"

	Dim	en <del>s</del> ions———		I			nsions———		
No. of	High	Wide	Deep	*List	No. of	High	Wide	Deep	*List
Stations	Inches	Inches	Inches	Price	Stations	Inches	Inche <b>s</b>	Inches	Price
4	18	$17\frac{1}{2}$	$5\frac{1}{2}$	\$87.60	10	18	171/2	$5\frac{1}{2}$	\$124.10
5	18	171/2	$5_{1_{2}}^{1_{2}}$	91.25	12 .	18	$17\frac{1}{2}$	$5\frac{1}{2}$	131.40
6 ′	18	$17\frac{1}{2}$	$5\frac{1}{2}$	94.90	15	18	171/2	51/2	142.35
7	18	171/2	$5\frac{1}{2}$	113.15	20	18	171/2	$5\frac{1}{2}$	160.60
8 ·	18	$17\frac{1}{2}$	$5\frac{1}{2}$	116.80	25	18	171/2	$5\frac{1}{2}$	<b>178.8</b> 5

Extra stations, per station, list \$5.84. Standard finish, oak.

For white enamel, add to list \$7.30.

Where more than 25 stations are required, 2 recording dials will be used.

Approved by the National Board of Fire Underwriters.

#### **BATTERY TYPE NO. 98** Four Stations, Without Timepiece

Schedule "E"

Dimensions————				
No.	High	Wide	Deep	*List
Stations .	Inches	Inches	Inches	Price
4	18	171/2	$5\frac{1}{2}$	\$87.60

Other sizes same price and dimensions as No. 76. Prices on paper dials, see preceding page.



No. 161



No. 162



No. 163

## Magneto Stations

For Use With Nos. 75 and 76 Time Detectors ored by the National Board of Fire Unclearmiters

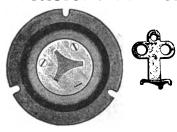
NO. 161 WOOD CASE	Schedule "E"
List No.	*List Price
161 Hand generator with removable handle	<b>5</b> 10.80
NO. 162 METAL CASE	Schedule "E"
Weatherproof case, for outdoor use and in more or less exposed places.	Deliteration E
List No.	*List Price
162 Hand generator with removable handle	
NO. 163 FLUSH METAL CASE	Schedule "E'
Intended for interior use flush with the wall.  List No.	*List Price
163 Hand generator with removable handle	\$16,06

\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

**Electrical House Goods and Novelties** 

### BATTERY KEY STATIONS AND SIGNAL SYSTEMS







Schedule "E"

No. 211

Battery Key Stations

For Use with Numbers 98 and 99 Time Detectors NO. 99 FLUSH STATION

Finish: Nickel plate, brush brass, old brass or polished brass \*List Price List No. \$1.44 .56 .88

NO. 211 KEY STATION Schedule "E" Finish: Nickel plate; brush brass, old brass or polished brass.

Flush station (mounted on 158 plate screw hole centers 3 1/2 inches to fit standard push button switch box).

A Surface station. Plate, 2 1/2 inches diameter

With any group "A" finish, add

With any group "B" finish, add

With any group "A" finish, add

With any group "B" finish, add

With any group "B" finish, add

With any group "B" finish, add 211 \$7.84 211A 4.80-211 .56 211 .88 211A .56 211A .88 Key only..... .46

NO. 72 RECEPTACLE AND PLUG Used in connection with No. 161 portable magneto for connecting magneto to circuit. The back plate is permanently installed and the circuit wires attached; the cap or plug is connected by means of a

flexible cord to the magneto and carried with it. Receptacle and plug complete..... **\$**1.35 Plug only.....

## Standard and Special Finishes

Note: Heavy face type indicates finish supplied when not otherwise specified.

Finish Group "A"

Finish Gro

English bronze

Polished copper

Gilt

Old English bronze Antique or Flemish brass Polished steel Oxidized brass English bronze Mottled copper Oxidized copper Antique copper or

Japanese bronze

Bauer-barff Acid or statuary bronze Lemon brass Gun metal

Black

Satin gold Etruscan gilt Gold bronze Oxidized silver Butler's silver Ormolu or French gilt

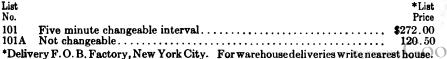
Finish Group "B" Burnished gilt Polished silver Pompeiian bronze Roman or dull gold Sand blast, antique brass Sand blast, old brass Verde antique

## Special Signaling Systems

#### PROGRAM CLOCKS

The use of the electric program clock is general in colleges, schools, factories and institutions of various sorts to automatically ring groups of bells at prearranged intervals for the changing of classes, shifting of labor gangs, dynamo and furnace changes, cessation and resuming of work, etc.

The operating principle is found in the rotation of a circuit-closing contact arm synchronized with a clock movement. The contact intervals are furnished either changeable at will or fixed and provided for contacts of variable lengths, during which any number of bells of any desired type and style are caused to ring. A switch is provided for hand ringing and for cutting out the program ringing. The clock movement regularly furnished is an 8-day key-winding type of superior construction. Twelve contact keys are furnished. The case is excellently finished oak.







Model F-2022 Enclosed Pull-lever Code Ringing Fire Alarm Box



Model 2120 Single-stroke Half-guarded Gong

any good mechanic.



Model 2620 Electro-mechanical Gong



Model 2500 Vibrating, Half-guarded Fire Alarm Gong

Faraday Interior Fire Alarm Systems are particularly designed and suitable for factories, schools, colleges, public institutions, hotels, theaters, office buildings, department stores, warehouses, apartment houses, etc.; in fact, for every class of building where life and property should be protected from the fire hazard, but with full consideration that an interior fire alarm'system must be simple and economical, both as to initial cost and maintenance.

Faraday Fire Alarm Systems are designed to operate from three sources of electrical energy, viz.:

- (1) D.C. electric light and power circuits.
- (2) A.C. electric light and power circuits.(3) Battery (both primary and storage) circuits.

Faraday Interior Fire Alarm Systems represent the latest developments in the fire alarm field. Particular attention is called to the entirely original cabinet-unit mounting feature of all control apparatus and instruments. Cabinets are absolutely fireproof. They are of heavy pressed steel, finished in glossy vermilion. All instruments and control mechanisms are back connected, mounted on slate panels. Cabinets are furnished with glass windows through which all instrument dials are easily read without opening doors. Terminals on slate panels are latest type Underwriters, pattern, with each terminal so plainly marked that the connecting of circuit wires to mains, boxes, gongs and trouble bells can be readily made by

Faraday Fire Alarm Systems may perhaps be classified in two general types, viz.:

(a) Electrically supervised closed circuit code ringing.

(b) Non-supervised open circuit non-code ringing.

Electrically supervised closed circuit code ringing systems are operated by a continuous flow of electric current, by either pull lever or break-glass boxes, indicating by powerful single-stroke signals on gongs, location of box from which signal originates. Main circuits, box circuits and gong circuits are constantly under electrical test. Trouble of any nature on any part of this system or failure of operative current automatically indicating itself by ringing of trouble bell.

Non-supervised open circuit non-code ringing systems are operated by the current when the simple break-glass type box is put in service. The great disadvantage of this open-circuit non-supervised system is that some accident may, of course, at any time open the circuit and when this happens an attempt to send in a fire signal completely fails. Furthermore, with the open circuit system, location of box from which signal originates cannot be indicated, as the bells simply ring continuously till the glass in the box is replaced.

Electrically supervised closed circuit systems may be sub-divided into two classes, viz.:

(a) Non clockwork single-stroke gong systems.(b) Electro-mechanical (clockwork) gong systems.

Send for special 32 page bulletin on Faraday Fire Alarm Systems.

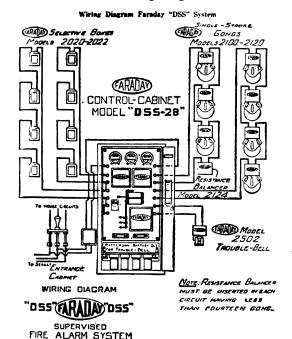


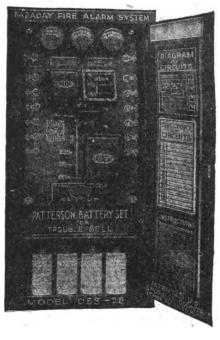
Model 2040
Break-glass Non-code
Ringing Fire Alarm Box
with Outlet Box Back
for Conduit

WITH SINGLE - STROKE FARADAY GONGS

## FARADAY FIRE ALARM SYSTEMS

Selective Code Ringing Closed Circuit Type, for 100-250 Volt D.C. Circuits Using Single-stroke Non-clock work Faraday Gongs





Model DSS, Faraday Fire Alarm Control Cabinet

## MODEL DSS, ELECTRICALLY SUPERVISED

Model DSS (direct single-stroke) Faraday Fire Alarm Systems are designed for use where an absolutely dependable supply of direct current is available at all hours of the day and night.

Model DSS systems are similar to Model DEM systems, but employ single-stroke gongs, which require

no winding up, in place of Electro-mechanical Gongs, which do require winding.

Main circuits, box circuits and gong circuits are constantly under electrical test. Trouble of any nature, on any part of the system or failure of operative current is automatically indicated by ringing of Trouble Bell.

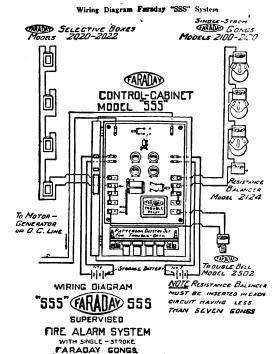
	CONTROL CABINETS	
List No.	Description	List Price Each
DSS-14 DSS-28	Faraday Control Cabinet for installations not exceeding 14 gongs, complete	\$168.80 202.50
DSS-42 DSS-56	Same as DSS-14, except for 29 to 42 gongs. Same as DSS-14, except for 43 to 56 gongs.	236.30 270.00
	SINGLE-STROKE HALF-GUARDED GONGS	
2120 2120	6 inch half-guarded single-stroke Faraday Enclosed Type Gong	\$18.00 22.50
2120 2120	10 inch half guarded single-stroke Faraday Enclosed Type gong	27.00 33.80
2120 Abo	14 inch half-guarded single-stroke Faraday Enclosed Type Gongeve gongs are furnished with knock-outs to slip both ½ or ¾ inch conduit.	40.50
	BOXES	
F-2022 A-2020	Enclosed-lever code-ringing selective type Faraday BoxBreak-glass code-ringing selective type Faraday Box	\$21.50 30.00
	TROUBLE BELLS	
2502	Faraday Enclosed Type Trouble Bell, with outlet-box back	\$7.50

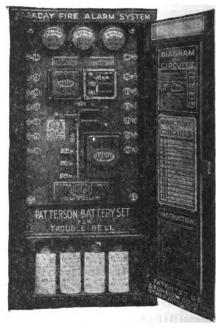
Where any circuit of less than 14 gongs is to be installed, same must be specified, so that resistance-unit may be mounted in control-cabinet.

Note: Conduit box backs are shipped separately for roughing; they are packed in individual cartons, labeled B-2120 for half-guarded gongs; B-2100 for under-dome gongs; BF-2022 for enclosed-lever boxes, and B-2502 for trouble bells. When so shipped, conduit box backs will be charged out at \$2.30 list, and corresponding reduction made in billing gongs, boxes, bells and resistance balancers.

Delivery F. O. B. New York City. For warehouse deliveries write nearest house.

Selective Code Ringing Closed Circuit Type





Model SSS, Faraday Fire Alarm Control Cabinet

## Model SSS, Electrically Supervised

Model SSS (storage single-stroke) Faraday Fire Alarm Systems are designed for use where neither A.C. nor D.C. electric light or power current is available from a constantly dependable source, but where either A.C. or D.C. at certain periods is available.

Model SSS systems are similar to Model SEM systems, but employ single-stroke gongs which require

no winding up in place of electro-mechanical gongs which do require winding up.

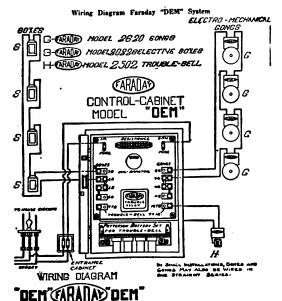
Main circuits, box circuits and gong circuits are constantly under electrical test. Trouble on any part of system, or failure of operative current is automatically indicated by ringing of trouble bell. CONTROL CABINETS

	CONTROL CADINLIS	
List		List Price
No.	Description	Each
SSS-7	Faraday Control Cabinet for installations not exceeding 7 gongs, complete	\$185.60
SSS-14	Same as SSS-7, except for installations 7 to 14 gongs	222.80
SSCD	Charging cabinet for charging storage battery from D.C. circuits	123.80
SSCM	Charging cabinet for charging storage battery from motor generator	137.50
	BATTERIES	
SB-24	Storage battery for above systems, complete per cell	<b>\$</b> 6.00
	MOTOR GENERATORS	
MG-108	Motor generator, direct connected, with base, to generate for storage battery charging	On appl.
	HALF-GUARDED SINGLE-STROKE GONGS	
2120	6 inch Single-stroke Enclosed Type Gong	\$18.00
2120	8 inch Single-stroke Enclosed Type Gong	22.50
2120	10 inch Single-stroke Enclosed Type Gong	27.00
2120	12 inch Single-stroke Enclosed Type Gong	33.80
2120	14 inch Single-stroke Enclosed Type Gong	<b>40.50</b>
	BOXES	
F-2022	Enclosed lever code ringing selective type Faraday Box	\$21.50
A-2020	Break-glass code ringing selective type Faraday Box	30.00
	TROUBLE BELLS	
2502	Enclosed Type Trouble Bell, with outlet box back	\$7.50
	ere any circuit of less than 14 gongs is to be installed, same must be specified, so that resist mounted in control cabinet.	tance-unit

Send for special bulletin on Faraday Fire Alarm Systems.

Note: Conduit box backs are shipped separately for roughing; they are packed in individual cartons, labeled B-2120 for half-guarded gongs; B-2100 for under-dome gongs; BF-2022 for enclosed lever boxes; and B-2502 for trouble bells. When so shipped, conduit box backs will be charged out at \$2.30 list, and corresponding reduction made in billing gongs, boxes, bells and resistance balancers.

Delivery F. O. B. New York City. For warehouse deliveries write nearest house.





Model DEM, Faraday Fire Alarm Control Cabinet

## **BUPERVISED**

FIRE ALARM SYSTEM WITH ELECTRO - MECHANICAL FARADAY GONGS

## Model DEM, Electrically Supervised

Selective Code Ringing Closed Circuit Types, for 100-250 Volt D.C. Circuits
Using Electro-mechanical Faraday Gongs

Model DEM (Direct Electro-Mechanical) Faraday Fire Alarm Systems are designed for use where an

absolutely dependable supply of direct current is available at all hours of the day and night.

Model DEM systems are similar to Model DSS systems, but employ electro-mechanical gongs which require winding up in place of single-stroke gongs which require no winding up

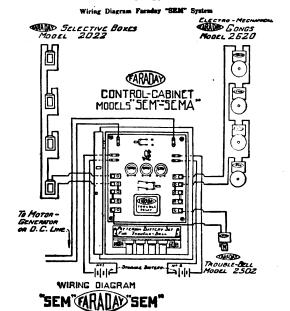
Main circuits, box circuits and gong circuits are constantly under electrical test. Trouble of any nature, on any part of the system or failure of operative current, is automatically indicated by ringing of Trouble Bell.

	CONTROL CABINETS	
List		List Price
No.	Description •	Each
<b>DEM-14</b>	Control Cabinet for installations not exceeding 14 gongs, with slate panel, instru-	
	ments, etc., complete	<b>\$</b> 135.00
<b>DEM-28</b>	Same as DEM-14, except for 15 to 28 gongs	168.80
	D.C. ELECTRO-MECHANICAL GONGS	
2620	6 inch Electro-mechanical Faraday Gong	\$48.40
2620	8 inch Electro-mechanical Faraday Gong	49.70
2620	10 inch Electro-mechanical Faraday Gong	52.30
<b>2620</b>	12 inch Electro-mechanical Faraday Gong	<b>57.20</b>
Abov	e gongs are furnished with outlet box backs to slip $\frac{1}{2}$ inch or $\frac{3}{4}$ inch conduit, as specified.	
	BOXES	
F-2022	Enclosed lever code ringing selective type Faraday Box	\$21.50
A-2020	Break-glass code ringing selective type Faraday Box	30.00
	TROUBLE BELLS	
2502	Faraday Enclosed Type Trouble Bell, with outlet box back (one trouble bell required for each system)	<b>\$7</b> .50
	TESTING DEVICE	
TTTD OOOO		AF 00

TT-2022 Testing device consisting of telephone receiver, cord and plug...... Note: Conduit box backs are shipped separately for roughing. They are packed in individual cartons labeled B-2620 for electro-mechanical gongs, BF-2022 for enclosed lever boxes, B-2502 for trouble bells. When so shipped conduit box backs will be charged out at \$5.60 list for Electro-Mechanical gongs, \$2.30 list for enclosed lever boxes; \$2.00 list for trouble bells and corresponding reduction made in billing gongs, boxes and bells.

Prices for larger or special Model DEM systems on application. Send for special 32 page bulletin on Faraday Fire Alarm Systems.

Selective Code Ringing, Closed Circuit Type, Using Electro-mechanical Faraday Gongs



SUPERVISED FIRE ALARM SYSTEM WITH ELECTRO - MECHANICAL FARADAY GONGS



Model SEM, Faraday Fire Alarm Control Cabinet

Model SEM, Electrically Supervised

Model SEM (Storage Electro-Mechanical) Faraday Fire Alarm Systems are designed for use where neither A.C. nor D.C. electric light or power current is at all times available from a constant absolutely dependable source, but where either A.C. or D.C. at certain periods is available.

Model SEM systems are similar to Model SSS systems, but employ electro-mechanical gongs which

Model SEM systems are similar to Model SSS systems, but carping up. require winding up in place of single-stroke gongs which do not require winding up.

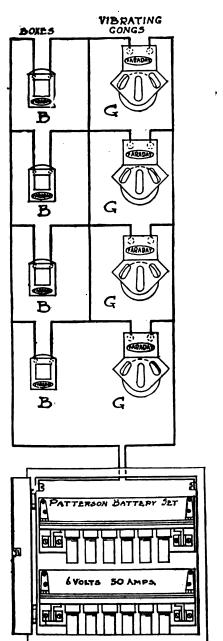
Trouble of any nature Main circuits, box circuits and gong circuits are constantly under electrical test. Trouble of any nature on any part of the system, or failure of operative current is automatically indicated by ringing of Trouble Bell. CONTROL CABINETS

List	List Price
	THOU I LICO
No. Description	Each
	\$258.80
SEM-28 Control Cabinet for installations 15 to 28 gongs, inclusive, complete	292.50
SEMA-14 Similar to SEM-14, except has in addition controller for motor generator	272.50
SEMA-28 Similar to SEM-28, except has in addition controller for motor generator	306.20
STORAGE BATTERY	
SB-24 Storage battery for above systems complete (not charged), per cell	\$6.00
MOTOR-GENERATOR	
MG-108 Motor generator, direct connected unit, to generate direct current for storage battery charging, complete, with base (may be used in connection with either SEMA-14 or	
SEMA-28 control cabinets)  D.C. ELECTRO-MECHANICAL GONGS	On Appl.
D.C. ELECTRO-MECHANICAL GONGS	
2620 6 inch Electro-mechanical Faraday Gong	\$48.40
2620 8 inch Electro-mechanical Faraday Gong.	49.70
2620 10 inch Electro-mechanical Faraday Gong	52.30
2620 12 inch Electro-mechanical Faraday Gong	57.20
Above gongs are furnished with outlet box backs to slip either ½ or ¾ inch conduit.  BOXES	
F-2022 Enclosed lever code ringing selective type Faraday Box	\$21.50
A-2020 Break-glass code ringing selective type Faraday Box	30.00
TROUBLE BELLS	
2502 Enclosed Type Trouble Bell, with outlet box back	\$7.50
Send for special 32 page bulletin on Faraday Fire Alarm Systems.	
Note: Conduit box backs are shipped separately for roughing; they are packed in individual	cartons
labeled B-2620 for Electro-mechanical Faraday Gongs; BF-2022 for enclosed lever boxes, and B-	2502 for

billing gongs, boxes and bells.

trouble bells. When so shipped, conduit box backs will be charged out at \$5.60 list for electro-mechanical gongs, \$2.30 list for enclosed lever boxes; \$2.00 list for trouble bells and corresponding reduction made in

Non-selective Non-code Ringing, Open Circuit Type, for Battery Circuits Using Vibrating Gongs





Model 2040 Break-glass Box



Model 2500 Enclosed Vibrating Gonge,

## No. 1, Non-supervised, Open Circuit

Faraday No. 1 Fire Alarm System is a simple open circuit, non-selective, non-code-ringing, non-supervised system, i. e., does not indicate the location of the box from which the signal originated and does not automatically indicate failure of operative current or derangement of circuits or apparatus.

Breaking the glass of any box automatically rings all gongs. Gongs are vibrating type and after glass is once broken, will continue ringing until glass is replaced in box.

CONCE

	GONGS	
List No.	Description	List Price Each
	•	Each
2500	8 inch Enclosed Type Vibrating Gong, wound to special resistance, as follows: Up to and including 4 gongs, resistance per gong, 10 ohms. Up to and including 9 gongs, resistance per gong, 20 ohms. 10 gongs and over, resistance per gong,	
	40 ohms	\$20.80
2500	10 inch gong, same as above	27.00
2500	12 inch gong, same as above	33.80
	BOXES	
2040	Break-glass Fire Alarm Box for surface work, for ½ inch conduit	\$9.00
2042	Break-glass Fire Alarm Box for concealed work, for ½ inch conduit	9.00
	BATTERY SETS	
FA-62	Battery Set, surface steel, for not over 4 gongs, no cells	\$48.70
FA-102	Battery Set, surface steel, for 5 to 9 gongs,	•
FA-122	inclusive, no cells	81.00
	cells	97.30

Note: Conduit box backs are shipped separately for roughing. They are packed in individual cartons labeled B-2500 for enclosed type vibrating gongs, B-2040 for break-glass boxes, surface type, and B-2042 for break-glass boxes, flush type. When so shipped, conduit box backs will be charged out at \$2.30 list for bells and boxes and corresponding reduction made in billing bells and boxes.

Send for special 32 page bulletin on Faraday Fire Alarm Systems.

Delivery: F. O. B. New York City. For warehouse deliveries write nearest house.

#### FARADAY FIRE ALARM BOXES







Model F-2022, Showing Mechanism

## Enclosed, Pull-lever Selective Code Ringing

Enclosed Pull-lever Code Ringing Selective Type Fire Alarm Boxes are designed to give any signal required for standard fire alarm work, and automatically transmit the signal four times with absolutely perfect timing of each signal.

The boxes are absolutely non-interference type; i.e., after the lever has once been pulled down and released, the signal cannot be either intentionally or unintentionally disarranged.

The mechanism of the Faraday Box has the following important points of superiority:

- 1. Positive, self-cleaning make and break contactors, each of which is provided with duplex silver contacts.
- 2. Contact springs are of genuine phosphor-bronze, insulated from break wheel by Bakelite rollers, and mounted on separate individual Bakelite blocks. This completely overcomes the old-time trouble so frequently experienced in boxes where the two contact springs were mounted on the same block. There can be no trouble from grounds and shorts—a common source of annoyance in competitive boxes, wherever there is careless use of flux in soldering.
- 3. Solid brass code or break wheel is rigifuly mounted on shaft. The break wheel requires no insulation from shaft, which is provided with a square shoulder, making it impossible for the break wheel to turn on the shaft or work loose, a trouble frequently found in other boxes.
  - 4. Strong powerful train of heavy cut gears.
  - 5. Three separate and distinct test devices, viz.:
    - (a) Silent test with Model TT-2022 telephone receiver and plug. This test enables the box to be operated in a manner exactly similar to an actual sounding of the alarm, but does not ring the gongs, although the signal can be heard in the telephone receiver.
    - (b) Silent test by left hand turn of test key. This test, by pulling down the lever, tests the box train only.
    - (c) Standard key test by right-hand turn of test key. This test, without pulling down lever, permits any predetermined signal to be given and also test of gong circuits and gongs.
  - 6. Contact points can be very positively cleaned by right-hand turn of test key.
- 7. Transparent glass enclosing case over mechanism, securely seated on to a heavy felt gasket, keeps all dust out of mechanism, yet affords full view of every part of the mechanism.

Seal feature prevents unauthorized access to the mechanism. Mechanism may be readily resealed by any authorized person.

- 9. Circuit wire terminals, approved Underwriters' pattern, on substantial Bakelite blocks, are mounted at the front and top of outlet box, convenient to conduit entrances where circuit wires are brought in.
- 10. Separable outlet box backs for conduit entrances render unnecessary the installation of mechanism and doors until after roughing is done.

List No.	Description	Price Each
F-2022	Enclosed Pull-lever Code Ringing Selective Type Faraday Fire Alarm Box, with outlet box back for conduit, complete	\$21.50
BF-2022	Outlet box back only	2.30
MF-2022	Mechanism only and doors (no outlet box back)	19.20

Delivery F. O. B. New York City. For warehouse deliveries write nearest house.

### Western Electric

### FARADAY FIRE ALARM BOXES







Model WF-2022, Door Open

## Weatherproof, Enclosed, Pull-lever, Selective Code Ringing

These boxes are a combination of the standard pull-lever box Model F-2022 in a heavy cast iron weather-proof enclosing case, finished in glossy English vermilion.

In many exposed locations these boxes are extremely desirable. While specifically designed for outside installation, their use is not limited to this class of work, for in many cases interior fire alarm boxes are installed where they are subject to mechanical injury and dampness. These boxes are ideal for places where these conditions exist and are often desirable for installations, where it is advantageous to prevent access to the box for the sending of an alarm by other than authorized parties with proper keys.

These boxes are regularly furnished with substantial flush setting brass butts as shown in illustration. Outer doors are furnished as specified, either with Sargent brass flatkey spring latch or turn-handle-brass spring latch without key.

Faraday Weatherproof Boxes are regularly furnished drilled and tapped universal to take  $\frac{1}{2}$  inch and  $\frac{3}{4}$  inch conduit, as the work requires.

When so specified, weatherproof boxes will be furnished to receive any size conduit at any location or locations in box special requirements may demand.

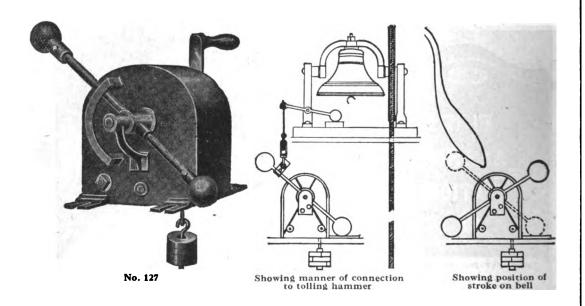
List		List Price
No.	Description	Each
WF-2022	Weatherproof fire alarm box, consisting of standard pull-lever box enclosed in weatherproof case complete, with either Sargent Brass Spring Latch with flat key or turn-handle brass spring latch without key, as specified	<b>\$</b> 36.00
W-2022	Cast iron weatherproof enclosing case only, with either Sargent Brass Spring Latch with flat key, or turn-handle brass spring latch without key, as specified (without F-2022 pull-lever box)	15.20
OF-2022	Pull-lever selective code-ringing type fire alarm box only (no lever enclosing door), without weatherproof enclosing case	20.90

Send for special 32 page bulletin on Faraday Fire Alarm Systems.

Delivery F. O. B. New York City. For warehouse deliveries write nearest house.

## Western Electric

#### **EDWARDS SPECIALTIES**



## Tower Bell Strikers

No. 127

Schedule "E"

This apparatus is used to automatically sound fire or general alarms on large bells. It is also available for sounding time or service periods on church bells and can be so installed that it does not in any way interfere with the regular hand tolling hammer.

It is regularly wound to a resistance of 25 ohms for battery operation, but will be furnished for service on direct current up to 600 volts or alternating current 100 to 250 volts, 25 or 60 cycles single phase without additional charge. Where used in connection with fire alarm systems, high voltage may be used for operation of striker only by the introduction of a relay, this being necessary as alarm boxes are not designed to take care of high voltages. Always specify, however, if for open or closed circuit service.

Capacity of striker, about 100 blows at one winding. Weights drop about six inches for each stroke of hammer. From 50 to 75 pounds, depending on size of bell, are required for operation.

This apparatus is well adapted for town or village fire alarm systems, and the Nos. 1180-1181 and 118 boxes are recommended for use with it.

List No.		•	*List Price
127	For bells up to 2000 lbs.	Hand winding	<b>\$</b> 560.00
127A	For bells up to 3000 lbs.	Hand winding	640.00

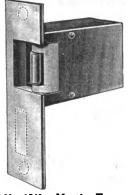
In ordering always state frequency as well as voltage of operating current.

Price includes cable for weights but not the weights.

\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

## **ELECTRIC DOOR OPENERS**









No. 155. Solid Nose

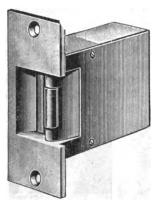
No. 1541. Mortise Type

No. 52

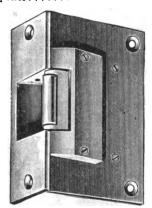
No. 239

## Door Openers and Latches

	Door Openers and Lateness					Schedule "E"		
List	Wilds		nensions——	Ònanina	Dimensions Face Plate	Finish	Std. Pkg.	List Price Each
No.	Width	Depth	Thickness	Opening	race riate	Limpn	9	
155	2 ins.	$2\frac{7}{8}$ ins.	$1\frac{1}{8}$ ins.	$1\frac{1}{4}$ ins.	$1\frac{1}{4} \times 3\frac{3}{8}$ ins.	Brass	25	<b>\$</b> 3. <b>2</b> 0
1541	2 ins.	$3\frac{7}{8}$ ins.	1½ ins.	$1\frac{1}{4}$ ins.	$1\frac{1}{2} \times 6\frac{3}{8}$ ins.	Brass	6	8.25
*52	3 ins.	$3\frac{1}{4}$ ins.	$\frac{7}{2}$ ins.	1/2 x 3/4 ins.	$1 \times 4^{3/4}$ ins.	Bronze	1	<b>23</b> .44
239		use with No.		/2 /4		Bronze	1	2.68



No. 154. Roller Nose



No. 153. Plate Type Roller Nose



No. 152. Rim Type Solid Nose

Schedule "E"

## Door Openers and Latches

List No.	Width	Depth	Thickness	Dimensions— Opening	Face Plate	Side Plate	Finish	Pkg.	ist Price Each
**154	2 ins.	$2\frac{7}{8}$ ins.	$1\frac{1}{8}$ ins.	$1\frac{1}{4}$ ins.	$1\frac{1}{4} \times 3\frac{3}{8}$ ins.		Brass	$\frac{25}{c}$	\$4.50 5.25
<b>1</b> 153	2 ins.	$3\frac{7}{8}$ ins.	$1\frac{1}{4}$ ins.	$1\frac{1}{4}$ ins.	$1\frac{1}{4} \times 3\frac{3}{8}$ ins.		Brass	0	
11152	2 ins.	$2\frac{3}{16}$ ins.	$1\frac{1}{8}$ ins.	1¼ ins.			Bronze	О	$\frac{5.25}{21.32}$
152	Arrange	ed to take	1/2 inch cond	luit				• • • • •	21.32

Charge for special resistance all door openers same as R. E. A. L. Bell.

Delivery F. O. B. New York City. For warehouse deliveries write nearest house.

\*For use with sliding doors.

\*\*For heavy doors. Mechanism enclosed. Requires straight mortise.

‡For door frames too thin to take mortise. ‡‡For surface or rim locks, thin doors, iron gates, etc.

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### MISCELLANEOUS SWITCHES

#### **Door Switches**

## Fit Standard Switch Boxes

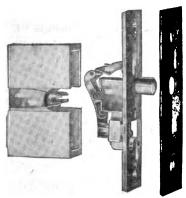
Eco and Lungen Door Switches are designed to automatically light and extinguish electric lamps by the opening or closing of a door. They are used in telephone booths, bank vaults, closets. dressing-rooms, etc. Attention is called to the compactness of the switches; the springs and contacts are phosphor bronze; all types are guaranteed mechanically and electrically perfect. Finish, brass, unless otherwise specified.

GENERAL DESCRIPTION



Schedule "E"

Made to operate every other time; operates as follows: when door is shut, light is off; open door, lamp lights; after entering, shut door, lamp remains lighted; open door for exit, lamp goes out; shut door, lamp remains out.



No. 175

No. 174

List No.	Style		Std. Pkg.	*List Price
174	Eco	Capacity 110 V. 5 amp	. 6	<b>\$6</b> .30

**LUNGEN NO. 175** Schedule "E" Lungen 110 V. 5 amp..... \*175A \$4.50 †175B Lungen 110 V. 5 amp..... 4.50

\*Lights lamp when door is opened; turns it off when door is shut. †Lights lamp when door is shut; turns it off when door is open

#### **SWITCH BOXES** Schedule "E"

Switch boxes are specially designed for placing in mortise of door frame. If sufficient space is available any standard flush switch case may be used, as the screw centers on Eco and Lungen switches are the same as on standard push switches.

List No. 2000 Box

Width Length Depth Std. Pkg. \*List Price 11/4 in.  $3\frac{5}{8}$  in.  $2\frac{5}{8}$  in. 6

\$1.35



No. 172



No. 171





No. 168



No. 165

## **Battery Switches** HARD RUBBER BASE

Schedule "E"

				^List	Prices	
List			Std.			Adv
No.	Style			1-pt.	2-pt.	per pt.
172	Keystone .	Nickel trimmings, hollow back. Regular up to 3 pt.	6	\$0.52	\$0.60	\$0.16
171	Round	Nickel trimmings, hollow back. Regular up to 6 pt.	6	.52	.60	. 16
178	Square	Nickel trimmings, hollow back. Regular up to 3 pt.	6	.67	.81	. 16
168	Square	Nickel plate binding posts and trimmings	6	1.12	1.36	.46
165	Pole-changing	Nickel trimmings, back connections	3	2.10	Special	
165A	Pole-changing	Nickel trimmings, front connections	3	2.80	Special	

Engraving on knobs, per letter, list, 25 cents additional.

\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

## MISCELLANEOUS BATTERY SWITCHES









No. 107 Metal

No. 164 Metal

No. 104 Wood

		SINGLE AND MULTIPLE CONTACTS			Schedu	le "E"
List		•	Std.	*List	Price	Advance
No.	Style Control	Description	Pkg.	1 pt.	2 pt.	per pt.
109	Metal base	Insulated	12	\$0.60	<b>\$</b> 0.50	Special
107		Insulated 4 pt				<b>\$</b> 0.17
164	Crown	Metal base, quick double break. Single pole	12	. 50	Special	
104	Crown	Same as above, but wood base	12	. 50	Special	
Brush brass finish, any metal switch, \$0.20. An assortment of twelve also constitutes a standard package.						



No. 103 Wood

		GANG SWITCHES Sched	lule "E"		
List No	o. Style Control	Description	*List Price		
103	Section	Mounted on any regular wood—2 points	. \$2.50		
		Mounted on any regular wood—3 points	. 3.00		
		Mounted on any regular wood—each additional point	60		
104	Crown	Mounted on any regular wood—2 switches	2.50		
		Mounted on any regular wood—3 switches	3.00		
		Mounted on any regular wood—each additional switch	60		
(1 Cod base billiones farming and a series and a series below a series and a series					
Wood base switches furnished oak finish, metal switches nickel plate, unless otherwise ordered. I white enamel finish on wood base, add to list \$1.00.					



Rear View No. 102



Front\_View No. 192



No. 108

NO. 102, V Has polished oak base with nickel plated metal nished up to 25 points.	wood BASE parts. Made regularly up to 6 po	Schedule "E' oints. Can be fur	
List No. Description 102 1 point, Spring Clip Contacts. 102 2 point, Spring Clip Contacts. Each additional point.		1 .6	0

NO. 108, WOOD BASE  A substantial spring lever switch arm which snaps over contact point, making it jar wherever a high class positive lever switch is desired.	Schedu proof.	
108 1 point	12 12 12	\$1.00 1.50 1.90

#### Oak or any Regular Wood Finish

If ordered assorted with Number 102 switch, thirty-five may constitute a standard package.

\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

## Western Electric

#### **PUSH BUTTONS**







No. 1386



No. 1382

## Watertight Push Button

This push button is for use in boats, ice houses, cold storage plants, mines, or any place where the atmosphere is continuously damp. A watertight pigskin cap is held in place over the push center by a threaded ring. The base is solid bronze with two cast lugs projecting, through which connecting wires

List No.	Mfr. No.	Diameter	†I	List Price Each
360794			With platinum contacts	
360795	*1376	$2\frac{1}{2}$ in.	Without platinum contacts	2.16
Dring	a includa :	any finish	from Nos 1 to 11 inclusive	

## Improved Watertight Push Button

Navy Standard

This push button has heavy German silver springs with platinum contacts. Screw cap, rubber gaskets under the base and between the base and screw cap. Hard rubber back. Push center covered by pigskin, which is held in place by rim and four screws. 360796 1386 25% in. Improved Watertight Push Button.....

## Non-watertight Push Button

Navy Standard

This push button has heavy platinum contacts; screw cap. 238 in. Non-watertight Push Button..... 360797 \$1.60



No. 1258

360798



No. 1396



\$1.12

No. 1364

## Paper Weight Wood Desk Push

This is a polished wood push, with lead in bottom which can be used as a paper weight. It is very convenient and neat. List No. Mfr. No. †List Price Each

1258 Wood Push, oak only....

Wood Push Buttons							
List No.	Mfr. No.	Style	Size	Finish	†List	Price Each	
360799	1396	Walnut	$2\frac{1}{8}$ in.	Polished		. \$0.16	
360800	1398	Ash	$2\frac{1}{8}$ in.	Polished	***************************************	16	
360801	1399	Stained Cherry	$2\frac{1}{8}$ in.	Polished	***************************************	. 16	
360802	1401	Antique Oak	$2\frac{1}{8}$ in.	Polished		16	
360803	1397	Oak 1	$2\frac{1}{8}$ in.	Polished	**********		
360804	1402	Mahogany					

#### Extension Push Buttons

This can be used as a regular push button, and by attaching a double conductor flexible cord with pear push or table clamp on the end, the circuit can be extended to a bed for the convenient use of a sick person or to desk, table, etc.

List No. Mfr. No. †List Price Each 360805 Walnut or Oak....

\*The price quoted with each push is for the finish designated by the following numbers:

Finish No. 1, bronze, polished (natural color of metal). 2, nickel plated. 3, polished bronze, inlaid with black. 4, silver plated. 5, silver oxidized (mottled). 6, antique copper (dark color). 7, copper oxidized (mottled). 8, Bauer barff (dead black). 9, brass (plated). 10, appearance of a dull, wrought copper finish. 11, lemon brass (brushed brass).

†Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

### MISCELLANEOUS PUSH BUTTONS







No. 191



## Edwards Directory Push

No. 190 or 191

The Edwards Directory Push is equipped with unusually substantial connectors with formed ears to prevent the wire from spreading or slipping out. The button head screws have lower ends upset so that they cannot be backed out or lost. These screws make connections easy and most secure. Phosphor bronze, scraping, self-cleaning contacts, allow pleasant uniform push. The contact bridge and all current carrying parts are fully insulated from the front plate, making push available for use on metal if desired, without fear of grounding. The spaces for name cards are liberal in size; any single card may be inserted or removed without dismounting block or disturbing the others. The buttons ordinarily are supplied in lakek but nearly buttons can be furnished if desired. A large metal eyelet is provided in end of block to black, but pearl buttons can be furnished if desired. A large metal eyelet is provided in end of block to facilitate the introduction and protection of cable. Type No. 191 is for flush mounting directly on desk or wall. The wood block of the No. 190 is weighted so it may be used as a paper weight.

No.	*List	No.	*List	No.	*List
Buttons	Price	Buttons	Price	Buttons	Price
1	\$3.20	4	\$6.72	7	\$10.16
2		5	7.84	8	11.20
3	4.40 5.44	l 6	8.96	10	13.60

The list numbers apply to 190; for 191 add "F" after the number letter. For larger sizes, add to list for each button, \$1.60.

For pearl buttons, add to list per button, \$0.32.

For silk covered cable connected, add to list per foot, per button, \$0.24. Standard finish nickel; dark oak, mahogany and brush brass can be supplied without extra charge. Standard package, 3 or more plates, totalling 40 buttons.

## Paper Weight Push

Finish: Nickel plate, brush brass, old brass or bronze.

Made of pressed steel, weighted back, felt-covered, 8 to 12 button, cast case. Price includes No. 63 pushes matched finished rims. Special finishes group A or group B add to list 26 cents or 98 cents per push.

List No.	No. of Pushes	Size Inches	*List    List Price    No.	No. of Pushes	Size Inches	*List Price
71	${f 2}$	$2\frac{1}{2} \times 1\frac{7}{8}$	<b>\$</b> 4.24 71	6	$2\frac{1}{2} \times 1\frac{7}{8}$	* \$7.92
71	3	$2\frac{1}{2} \times 1\frac{7}{8}$	5.20   71	8	4 x 1 1/8	10.56
71	4	$2\frac{1}{2} \times 1\frac{7}{8}$	6.08    71	10	$4 \times 1\frac{1}{8}$	11.60
71	5	$2\frac{1}{2} \times 1\frac{7}{8}$	6.98   71	12	$5\frac{1}{2} \times 1\frac{1}{2}$	12.64

Other sizes up to 20 buttons.

For attaching green silk cord, per foot for each button, \$0.24. Special finishes group "A" add to list \$0.32. Special finishes group "B" add to list \$1.24.

Note: Heavy face type indicates finish supplied when not otherwise specified.

## Standard and Special Finishes

Note: Heavy face type indicates finish supplied when not otherwise specified.

Finish Group "A" Finish Group "B" Polished copper Burnished gilt Old English bronze Gilt Antique or Flemish brass Polished steel Satin gold

Oxidized brass Bauer-barff English bronze Acid or statuary bronze Mottled copper Lemon brass Oxidized copper Gun metal Antique copper or Black

Japanese bronze

Etruscan gilt Gold bronze Oxidized silver Butler's silver Ormolu or French gilt

Polished silver Pompeiian bronze Roman or dull gold Sand blast, antique brass Sand blast, old brass Verde antique

Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

#### FLUSH PUSH BUTTONS





## Midget and Mite Types

Schedule "R"

NO. 620 DIXIE, JR.

Finish: Nickel plate, brush brass, old brass or bronze.

Non-turnable centers. Fully insulated. Scraping contact. Economy binding post takes all sizes of wire. Screws cannot come out. A high-grade reliable push. No. 60 escutcheon may be used with this push.

List	Fits Hole	Center	Std.	*List
No.	Inches		Pkg.	Price
620	5/8	Light or dark pearl Pearl, protruding $\frac{1}{8}$ in.	50	<b>\$0.36</b>
621	5/8		25	.80







NO. 1062 NEW MIDGET, JR.

Schedule "E"

Finish: Nickel plate, brush brass, old brass or bronze.

Same as No. 62, but with scraping contact and shallow contact springs. No. 60 escutcheon may be used with this button.

List		Fits Hole		Std.	*List
No.		Inches	Center	Pkg.	Price
1062	•	5/8	Light or dark pearl	200	<b>\$0.32</b>

#### NO. 1162 NO CONTACT

Schedule "E"

Finish: Nickel plate, brush brass, old brass or bronze.

Same as No. 62 Midget, Jr., but without back springs or binding posts. Spring clip fasteners.

List	Fits Hole		Std.	*List
No.	Inches	Center	Pkg.	Price
1162	5/8	Light or dark pearl	50	\$0.25

#### NO. 63 NEW MITE

Schedule "E"

Finish: Nickel plate, brush brass, old brass or bronze.

Formed shell, over all,  $\frac{5}{8}$  x  $\frac{5}{8}$  inches; non-turnable centers, spring clip fasteners. Binding posts take up to No. 12 B. & S. wire.

List	Fits Hole		Std.	*List
No.	Inches	Center	Pkg.	Price
63	1/2	Light or dark pearl	<b>, 50</b>	<b>\$</b> 0.60

Note: Heavy face type indicates center and finish supplied when not specified. For ivory centers or special finishes see following page.

\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

#### FLUSH PUSH BUTTONS







No. 1059

## Midget Types

NO. 59 MIDGET

Schedule "E"

Finish: Nickel plate, brush brass, old brass or bronze. Non-turnable centers, secure spring clip fasteners, phosphor-bronze contacts. Binding posts take any size wire. No. 61 escutcheon may be used with this button.

List	
No.	

Fits Hole

Std. Pkg.

\*List Price

59 3/4 in. Light or dark pearl

50

\$0.70

NO. 1059 MIDGET

Schedule "E"

Finish: Nickel plate, brush brass, old brass or bronze.

Non-turnable centers, secure spring clip fasteners, phosphor-bronze spring, scraping contacts. Connectors take any size wire. No. 61 escutcheon may be used with this button.

1059

Light or dark pearl

\$0.64



No. 1159



No. 1160



No. 260

NO. 1159 MIDGET

Finish: Nickel plate, brush brass, old brass or bronze.
Two scraping contacts to close two circuits; non-turnable centers, recommended for telephone or annunciator work; No. 61 escutcheon may be used with this button.

List No. 1159

Fits Hole 3/4 in.

Center

Std. Pkg.

\*List Price

Light or dark pearl

50

\$1.20

\$1.20

NO. 1160 MIDGET

Schedule "E"

Schedule "E"

Finish: Nickel plate, brush brass, old brass or bronze.

Same as No. 1159, but for return-call use. No. 61 escutcheon may be used with this button.

1160

3/4 in.

Light or dark pearl NO. 260 VAN TASSELL 50

Schedule "E"

Finish: Nickel plate, brush brass, old brass or bronze.

Formed shell; durable insulation; scraping contacts; non-grounding phosphor-bronze contact springs recessed in insulator, locking in place. For closing 2, 3 or 4 circuits; 4 contacts furnished unless otherwise ordered.

260

3/4 in.

Light or dark pearl

\$1.20

**\$1.0**0

	Special Centers and Finishes
For any ivory center, add	

For hard rubber, insulating bushing, add...

For any group "A" finish, listed previously, add...

For any group "B" finish, listed previously, add..... .40 20 .60 For engraving, per letter..... .25

Note: Heavy face type indicates center and finish supplied when not specified.

\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

#### FLUSH PUSH BUTTONS





No. 116

Special Types NO. 85 QUICK BREAK

High Voltage

Schedule "E"

Finish: Nickel plate, brush brass, old brass or bronze.

No. 85 for 110 volts. No. 85A for 220 volts. Long, quick break, heavy phosphor-bronze contact springs, shell solid brass with condensite insulation, and rubber push, perfectly insulated.

List		Fits Hole		Std.	List
No.	Style	Inches	Center	Pkg.	Price
85	High Voltage	3/4	Hard rubber	<b>6</b> ,	<b>\$2.70</b>
85A	High Voltage	11/8	Hard rubber	6	6.00

Extra hard rubber bushings, for 110 volts, \$1.05. Extra hard rubber bushings, for 220 volts, \$1.40. Either of above for closed circuit, add to list, \$3.50.

#### NO. 116 SLOW BREAK

Schedule "E"

Finish: Nickel plate, brush brass, old brass or bronze.

Used in electric automobile controller handles, etc. It is supplied with wiping contacts and phosphorbronze springs.

List	_	Fits Hole		Std.	List
No.	Style	Inches	Center .	Pkg.	Price
116	Slow Break	1/2	Hard rubber	6	<b>\$1</b> .35

## MISCELLANEOUS PUSH BUTTONS





No. 147

# Compound Pushes

\*NO. 147 TYPE

Schedule "E"

Two piece separable block in oak, ash, cherry or mahogany; other woods special. Front hollowed for connections. Back solid, felt protected. Cord outlet not cut unless ordered. Price does not include buttons, but in ordering specify whether size "A," 5% inch, or size "B," 34 inch, is required.

List	' No. of	Size "A"	Size "B"	Std.	List	List	No. of	Size "A"	Size "B"	Std.	List
No.	Pushes	Inches	Inches	Qnty.	Price	No.	Pushes	Inches	Inches	Qnty.	Price
147	1	$2\frac{7}{16}x2\frac{7}{16}$	2 <del>13</del> x2 <del>13</del>	24	\$1.00	147	6	$8\frac{1}{16}x2\frac{7}{16}$	9 <del>16 x2   }</del>	18	\$3.40
147	${f 2}$	$3\frac{2}{16}x2\frac{7}{16}$	$4\frac{1}{16}x^{2}$	24	1.40	147	8	5 🙀 x3 🔏	$6\frac{9}{18} \times 4\frac{1}{18}$	16	4.00
147	3	$4\frac{11}{16}$ x $2\frac{7}{16}$	5 <del>%</del> x2 <del>1 3</del>	24	1.70	147	10	6 <del>18</del> x3 <del>18</del>	7 18 x4 18	16	5.00
147	4	$5\frac{13}{16}$ x $2\frac{7}{16}$	$6\frac{9}{16}$ x $2\frac{11}{18}$	18	2.00	147	12	$8\frac{1}{16}x3\frac{1}{16}$	$9\frac{1}{16}x4\frac{1}{16}$	16	6.00
147	5	$6\frac{14}{14}$ x $2\frac{7}{14}$	7 <del>  ž</del> x2 <del>  ž</del>	18	2.80	l		20 20			

For larger sizes, add to 12 button \$0.40 per button. If weighted for paper weight, add per button, list, \$0.32.

\*NO. 148 TYPE

Schedule "E" Same as No. 147, except block is in one piece with hollow back. In ordering, specify whether size "A," inch. or size "B." 3/2 inch. is required.

28 писп	, 01 812	e D, 74 II	icu, is requir	eu.							
148	1	$2\frac{1}{8}$ x $2\frac{1}{8}$	$2\frac{1}{2}x2\frac{1}{2}$	24	\$0.70	148	6	$7\frac{3}{4}$ x $2\frac{1}{8}$	83/4x21/2	18	\$1.80
148	2	$3\frac{1}{4}$ x $2\frac{1}{8}$	$3\frac{3}{4}$ x $2\frac{1}{2}$	24	1.00		8	$5\frac{1}{2}$ x $3\frac{1}{4}$	$6\frac{1}{2}$ x3 $\frac{3}{4}$	16	2.00
148	3	4¾x2⅓	$5 x^{2} \frac{1}{2}$	24	1.20		10	$6\frac{5}{8}$ x $3\frac{1}{4}$	7½x3¾	16	2.20
148	4	$5\frac{1}{2}$ x $2\frac{1}{8}$	$6\frac{1}{4}$ x $2\frac{1}{2}$	18	1.40	148	12	7¾x3¼	8¾x3¾	16	2.40
148	5	65%x2⅓	$7\frac{1}{2}$ x $2\frac{1}{2}$	18	1.60						

\*Sizes may be assorted in quantities of 24 to make standard packages. If size is not specified, size A will be furnished.

147 and 148 furnished in paper eartons, six in each.

Delivery F. O. B. factory, New York City. For warehouse deliveries write nearest house.

## PUSHES AND PUSH PLATES



Type

Flush

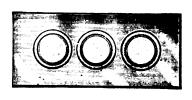
Flush

List No.

9627

9628







No. 180

No. 157D

Square and Diam	iona rusnes	Sch	edule "E"
	Size	Std.	List
Description	Inches	Pkg.	Price
Diamond Shape	$2\frac{1}{8} \times 3$	25	\$1.02
Square Shape	$1\frac{7}{8} \times 1\frac{7}{8}$	25	.80

Finish: Nickel plate, brush brass, old brass or bronze; for any group A finish add \$0.32 for any group B finish, add \$0.90.

#### Metal Plates for Pushes

#### METAL PLATE NO. 180

Plate Only for No. 147 and No. 148 Wood Blocks

Schedule "E"

Prices do not include buttons, but in ordering, specify whether size A, 5% inch, or size B, 3\% inch, is required.

		Size "A"	Size "B"	
List	No. of	5∕8 Inch Button	3/4 Inch Button	List
No.	Pushes	Inches	Inches	Price
180	1	$1\frac{5}{16} \times 1\frac{5}{16}$	134 x 134	<b>\$0.80</b>
180	2	$2\frac{3}{8} \times 1\frac{5}{18}$	$3 \times 1^{3/4}$	.88
180	٠ 3	$3\frac{1}{2} \times 1\frac{1}{14}$	$4\frac{1}{4} \times 1\frac{3}{4}$	. 96
180	4	$4\frac{1}{2} \times 1\frac{3}{4}$	$5\frac{1}{2}$ x $1\frac{3}{4}$	1.04
180	5	$5\frac{1}{2} \times 1\frac{1}{14}$	$6\frac{3}{4} \times 1\frac{3}{4}$	1.12
180	6	$6\frac{1}{2} \times 1\frac{5}{16}$	$8 \times 1^{3} \sqrt{4}$	1.36
180	8	$4\frac{1}{2} \times 2\frac{3}{8}$	5½ x 3	1.60
180	10	$5\frac{1}{2} \times 2\frac{3}{8}$	$6\sqrt[3]{4} \times 3$	2.08
180	12	$6\frac{1}{2} \times 2\frac{3}{8}$	8 x 3	2.80

#### PLATE NO. 157

For \( \frac{5}{8} \) Inch or \( \frac{1}{2} \) Inch Pushes Only

Schedule "E"

Finish: Nickel plate, brush brass, old brass or bronze.

Diamond or square shaped, bevel edge, drilled for 1 button, No. 157S square, size 1% inch; No. 157D diamond, size between points 21% x 31% inches. Assortment permitted to make standard package.

List No.	•	Std. Pkg.	List Price
157S	Square Plate	12	\$0.40
157D	Diamond	12	.40

For any group A finish, add \$0.32. For any group B finish, add \$0.90.

For engraving per letter, \$0.25.

In ordering, state for which button plates are intended. Size 5% inch, nickel plate finish, furnished if not otherwise ordered.

Note: Heavy face type indicates kind furnished unless otherwise specified.

#### Standard and Special Finishes

Gilt

#### Finish Group "A"

Black

Old English bronze

Oxidized brass

English bronze

Mottled copper

Oxidized copper

Antique copper or

Antique or Flemish brass

Polished copper Polished steel Bauer-barff Acid or statuary bronze Lemon brass Gun netal

Satin gold Etruscan gilt Gold bronze Oxidized silver Butler's silver Ormolu or French gilt

Finish Group "B"

Burnished gilt
Polished silver
Pompeiian bronze
Roman or dull gold
Sand blast, antique brass
Sand blast, old brass
ach gilt
Verde antique

Japanese bronze

Delivery F. O. B. factory, New York City. For warehouse deliveries write nearest house.

## PUSHES AND ACCESSORIES







No. 159



No. 136

#### Flush or Switch Box Plate PLATE NO. 158

Schedule "E"

Finish: Nickel plate, brush brass, old brass or bronze.
For standard switch box, drilled for 1, 2 or 3 buttons, 5% inch, or 1 or 2 buttons 34 inch. Screw hole centers are 3.32 inches. Machine screws furnished. In ordering, state for which button plates are intended, 5% inch, or 34 inch.

List Std. \*List No. Pkg. Price 

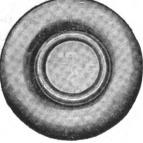
Elevator Push Buttons For use on floor landings and for the operation of elevator annunciators described elsewinere. List \*List No. Price Up and down.

J Up....
D Down.
Finish: Bauer Barff, other finishes special. 159 **\$**3.21 159U 2.92 159D 2.92

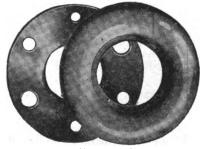
Combination Bell and Push Schedule "E" Consisting of bell and push for call and return call in connection with annunciators. List \*List Price No. Combination bell. oxidized copper finish..... 136 \$2.99



No. 60 or 61 Sectional View on Plaster Wall



No. 60 or 61 Complete



No. 60 or 61 Escutcheon and Plate

#### No. 60 Flush Push Escutcheon

Schedule "E" This is an exceptionally neat fitting for a midget push on plaster or where larger push than the midget is required. The iron plate is secured to the wall first; there being a number of screw holes it is always possible to have the screw engage a lath; the brass top is placed over the iron plate and a midget or midget junior button is then slipped into the hole and pressed tight. The spring clips on the side of

button grips the iron plate and holds the button and brass plate securely in place. List Fits Hole Std. \*List Price No. Style Inches 60 Escutcheon Metal 5% inch \$0.24 61 Escutcheon ¾ inch .24 Metal

Finish: Nickel plate, brush brass, old brass or bronze. For any finish in group A as listed on previous page add \$0.16. For any finish in group B add \$0.40. \*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

## Western Electric

#### **PUSH BUTTONS**







No. 25575



No. 25651

Schedule "R"

Wroug	ht	Metal	Pus	hes
-------	----	-------	-----	-----

List		Size 1	Number in	*List Price
No.	Description	Inches	Carton	per Dozen
25575	Wrought bronze, loose back	11/2	12	\$6.24
25578	Wrought bronze, loose back	23/6	12	6.24
25651	Cast bronze, screw cap	23/8	12	12.00
RI	ack centers only	-/6		

Any of these pushes furnished in bronze, nickel plate, antique copper, oxidized copper, bauer barff, or brush brass, without extra charge. Polished bronze furnished when not otherwise ordered.





No. 290



No. 206

## Anti-Wood Push Buttons

#### STAMPED STEEL

Schedule "R" To take the place of wood pushes. Better than screw cap buttons.

List	•	-	Size	*List	*List Price
No.	Style	Finish	Inches	Price Each	per 100
03	Wrought steel	Red bronze	$2\frac{1}{4}$	<b>\$</b> 0.17	\$14.00
04	Wrought steel	Planished bronze	21/4	.20	18.00
08	Wrought steel	Oxidized copper	21/4	.20	18.00
010	Wrought steel	Nickel plated	21/4	.20	18.00
011	Wrought steel		21/4	.20	18.00

#### **DIXIE FLOOR TREAD NO. 290**

Schedule "E"

Double heavy brass contact plates, felt-covered bottom. Can be used under rug to avoid cutting. Constructed sufficiently rigid to bear weight of rug. Strain removed from connections by passing wire over 3 rounded corners. Vise grip, solderless connections.

List		Std. 1	*List Price
No.		Pkg.	Each
<b>29</b> 0	Dixie tread	6	<b>\$</b> 1.90

#### TABLE CLAMP NO. 206

Schedule "E"

Finish: Nickel plate, brush brass, old brass or bronze. May be used in connection with floor push or wall plug.

A self-contained unit, buttons and contacts built into spring clamp-base. Contacts open to inspection and are self-cleaning, wire connections easy of access and very substantial.

\*List Price Std. Pkg. Each 6 \$1.20

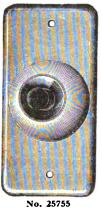
Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house,

## Western Electric

# **PUSH BUTTONS**

## Wrought Metal Pushes







No. 25793

#### PLAIN STYLES

## Schedule"R"

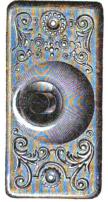
List i	•	Size	Number in	*List Price
No.	Description	Inches	Carton	per Dozen
25750	Wrought bronze, loose back	$4\frac{1}{8} \times 1\frac{3}{8}$	6	<b>\$</b> 3.96
25755	Wrought bronze, loose back	4 x 2	6	7.92
25793	Wrought bronze, loose back	$4\frac{1}{4} \times 2$	6	7.92







No. 25792



No. 25770

#### **FANCY STYLES**

#### Schedule "R"

List		Dize	Number in	LIST Price
No.	Description	Inches	Carton	per Dozen
25794	Wrought bronze, loose back	434 x 2	6	<b>\$</b> 7.92
25795	Wrought bronze, loose back	$4\frac{1}{8} \times 1\frac{3}{8}$	.6	7.92
25792	Wrought bronze, loose back	4 x 2	6	7.92
25770	Wrought bronze, loose back	4 x 2	6	7.92

For variety of finishes, see preceding page.

For warehouse deliveries write nearest house. \*Delivery F. O. B. Factory, New York City.

## MISCELLANEOUS PUSH BUTTONS











Pendant Pushes

	i ciiduite i doiles			
	NOS. 67 AND 268 PUSHES		Schedul	e "E"
List	Equi	pped	Std.	*List
No.	Case with	Push	Qnty.	Price
67	Ash, oak, cherry or stained mahogany No. 620	Dixie, Jr.	25	<b>\$</b> 0.60
67	Black walnut, maple, cypress or mahogany No. 620		12	1.00
67	White enamel		6	1.50
67	Genuine rosewood		6	6.00
268	White or black celluloid	Dixie, Jr.	6	1.42
	NO. 68 METAL PUSH		Schedul	e "E"
	Finish: Nickel plate, brush brass, old brass or bronze.			
List		ipped	Std.	*List
No.	Case with	Push	Qnty.	Price
68	Single, corrugated metal	Dixie, Jr.	12	\$0.60
	Group A finish, add \$0.40. Group B finish, add \$0.80. Assortment of finishes permitted to make standard package.	•		•
	NO. 69 METAL PUSH		Schedul	- 44E22
	***************************************		Schedul	le ··E··
	Finish: Nickel plate, brush brass, old brass or bronze.			
List		i <b>pped</b>	Std.	*List
No.		Push	Qnty.	Price
69	Duplex, corrugated metal	New Mite	6	\$2.00
	Assortment of finishes permitted to make standard package.			
	NO. 173 MULTIPLE PUSH		Schedul	e "E"
	Finish: Wood part, any ordinary wood. Oak shipped unless otherwise or	rdered. M	etal part,	nickel
plat	te, brush brass, old brass or bronze.		• ,	
List	Equi	pped	Std.	*List
No.		Push	Qnty.	Price
173	Two button		12	<b>\$3.42</b>
173	Three button		6	4.50
173	Four button		3	5.58
173	Five Button			6.40
173	Six Button			8.00
173	Seven Button			9.60
173	Eight Button			11.20
ame	Additions: For attaching flexible green silk cord, 1 or 2 conductor, per fol, add to list \$1.60.	oot, \$0.26.	For wh	ite en-
	Note: Heavy face type indicates finish supplied when not otherwise speci	ified.		

Standard and Special Finishes
Note: Heavy face type indicates finish supplied when not otherwise specified.

Finish C	Froup "A"	Finish Group "B"		
Old English bronze Antique or Flemish brass Oxidized brass English bronze Mottled copper Oxidized copper Antique copper or Japanese bronze	Polished copper	Satin gold Etruscan gilt Gilt Gold bronze Oxidized silver Butler's silver Ormolu or French gilt	Burnished gilt Polished silver Pompeiian bronze Roman or dull gold Sand blast, antique brass Sand blast, old brass Verde antique	

\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

## MISCELLANEOUS PUSHES







Floor and Extension Types

NO. 237 REGULAR FLOOR PUSH Schedule "E" Heavy contacts and indestructible insulation. A reliable push. No attachment for cord. Std. Pkg. \*List Price List No. 237 Floor push, nickel plate..... 6 **\$0.80** NO. 235 WITH REMOVABLE PLUG Schedule "E" Has extension attachment for connecting flexible cord with table clamp or pear push. Eyelets can be placed in carpet or rug for entrance of plug without injury. Heavy contacts and indestructible insulation. A reliable push. List No. Std. Pkg. \*List Price \$0.92 Combination complete..... 6 235 Plug only . . . . .32 Finish: Nickel plate, brush brass, old brass or bronze. ATTACHMENT PLUG AND PLATE NO. 72 Schedule "E" For flexible cord connection. Size of plate, 2 inches diameter. Std. Pkg. \*List Price List No. \$1.50 .80 Finish: Nickel plate, old brass, brush brass or bronze.





List No.



No. 160



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No. 69 Pear Push

Schedule "E"

## Combination Wall Plates

COMBINATION WALL PLATE NO. 205

Finish: Nickel plate, brush brass, old brass or bronze.

Metal plate 2 x 3 inches, with No. 620 Midget, Jr., push and No. 72 detachable extension plug, with flexible cord and pear push furnished if desired. \*List Price

For any group A finish, add \$0.64. For any group B finish, add \$1.35. For 6 feet of silk cord and pear push, add \$1.60.

COMBINATION WALL PLATE AND PLUG NO. 160 Schedule "E" Especially adapted for bedsides where a call is needed. A flexible cord can be attached to connect the calls to a pendant or desk push button. Can be used for any number of calls using pendant push No. 173. We can also furnish plug and plate without buttons. Plug is made of hard rubber and is so arranged that it cannot be inserted the wrong way. The No. 620 Dixie Junior push is used in plate.

List No.	No. Points	No. Buttons	List Price	List No.	No. Points	No. Buttons	*List Price
160	3	<b>2</b>	\$6.40	160	4	None	<b>\$</b> 5.60
160	3	None	4.80	160	5	4	8.80
160	4	3	7.60	160	5	None	6.40

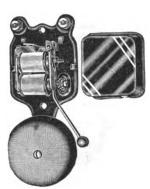
Add for No. 69 Double Pear push \$1.60. Finish: Nickel plate, brush brass, old brass, or bronze. Group A finish, extra \$0.72; group B, extra \$1.60. Engraving on centers, per letter, \$0.25. For green silk covered flexible cable connected, per foot, per conductor, \$0.24. Note: Heavy face type indicates finish supplied when not otherwise ordered.

\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

#### IRON BOX BELLS AND BUZZERS DIRECT CURRENT



No. 1845



No. 1855



No. 1848



No. 1900

## Western Electric Iron Box Bells and Buzzers

Class "B" Adjustable

This Bell is guaranteed to give satisfaction. Every part is designed for long and hard service with the possibility of a "ground" or "short circuit" in the bell practically eliminated. Specially formed hard fiber in addition to rubber covering is used to prevent circuit wires coming in contact with the bell frame. The base or back of the bell is made from dead soft steel formed under heavy pressure and arranged with a continuous rim which rests flush on the surface to which the bell is attached, preventing anything getting into the bell mechanism. The armature and magnets are mounted on a separate base which is securely attached to the back. The armature striker rod and ball are made from one piece of metal, therefore, no chance of any parts becoming loose. The armature is pivoted and fitted with an adjustable tension spring which can be adjusted for one to eight cells of battery. The contact post is non-turnable and fitted with a lock nut on the contact screw. The binding posts are non-turnable. Magnet cores are tipped with copper caps to prevent armature from sticking. The cap and frame are protected with a covering of black japan and all other parts are nickel and copper plated to prevent rusting. Quantity Prices

			۳.	underly rinco.	,
		1–10	10100	100-500	500 and Over
1855	Class "B" Adjustable Iron Box Bell, 2½ inch gong	<b>\$</b> 1.46	\$1.00	<b>\$</b> 0.80	<b>\$</b> 0.74
1856	Class "B" Adjustable Iron Box Bell, 3 inch gong	1.54	1.14	.84	.78
1857	Class "B" Adjustable Iron Box Bell, 4 inch gong	2.10	1.52	1.14	1.04
1858	Class "B" Adjustable Iron Box Buzzer	1.40	1.02	.76	.70

#### Class "C" Non-adjustable

The cover is made of tinned sheet steel, black japanned, and is held rigidly in place by metal projections on top of base, under which the cap is snapped.

The base is of heavy annealed steel, black japanned. Contact post is attached to the magnet head

which insures permanent adjustment and no danger of a "ground" on the base as it does not touch it. The armature, striking rod and ball are all made from one piece of metal—a sure prevention of loose

striker rods or balls. Magnets are standard size and end of upper magnet is fitted with a copper cap to prevent armature

sticking. Binding posts are non-turnable, which prevent holding screws from turning and making loose contact. Every detail of the bell and buzzer is constructed for durability and satisfactory service.

One cell of battery will operate either, and as many as five cells can be used if desired.

		1–10	10–100	100-500	500 and Over
1845	Class "C" Non-adjustable Iron Box Bell, 2½ inch gong	\$1.32	<b>\$</b> 0.96	<b>\$</b> 0.72	<b>\$</b> 0.64
1846	Class "C" Non-adjustable Iron Box Bell, 3 inch gong		1.02	.76	.70
1847	Class "C" Non-adjustable Iron Box Bell, 4 inch gong	1.88	<b>le</b> 44	1.08	.98
1848	Class "C" Non-adjustable Iron Box Buzzer	1.30	.90	.70	.62

## Improved Monitor Bell

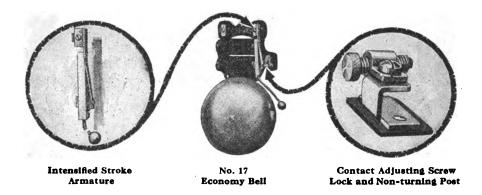
A neat, compact, reliable, round bell with double magnets, non-turning contact spring and binding The gong is nickel plated, and secured in its place so it cannot turn, giving always a clear ring instead of a rattle caused by a loose gong.

Less than 10 10 to 99 ... Digiti \$14.68 \$1.26 99 and Over 1900 Improved Monitor Bell.....

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## EDWARDS ECONOMY BELL

#### FOR BATTERY CURRENT



## Edwards No. 17 Economy Bell

The Edwards Economy Vibrating Bell No. 17 is a high grade adjustable fully insulated bell for all signal purposes.

Intensified Stroke Armature. The armature, contact spring and their support form a single unit. The spring serves the double purpose of holding the contact points and supplying the spring tension for the armature action. The portion of the spring beyond the contact point is bent at right angles and passes through an opening in the armature, and has a return bend so the end of the spring passes between the magnet head and the armature. When the magnets are energized they attract the armature, but the contact points do not separate until the armature has practically completed its stroke. The pull of the magnet is effective during the entire stroke, which is long and powerful. As the armature nears the magnet it engages the return bend of the contact spring, drawing the spring away from the contact screw and opening the circuit. This method of opening the circuit provides a longer and more powerful stroke than can be obtained in any other way. It insures the highest efficiency because it brings the armature into the densest magnet field before the circuit is broken. The separation of the contact points is not left to chance, but the circuit is mechanically opened. The action is positive, the design is simple and effective.

Improved Armature Suspension. The heavy bronze contact spring extends beyond the armature and is riveted to the armature support. This forms a rigid and secure suspension. The armature operates on the vibrating reed principle used so successfully in musical instruments.

New Code Connectors. New Code binding post as approved by the National Board of fire underwriters are supplied on this high grade bell. Wires may be quickly connected. After the screws are set down it is impossible for wires to spread or loosen. A positive locking screw holds the contact screw in position. The contact post is securely fastened to the frame so it positively cannot turn. The contacts are heavy, broadfaced and made of pure silver. Standard 6 volts.

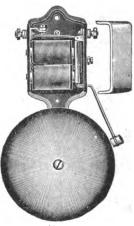
			List Price Each		sch
			Less than 5	5 to 9	10 or More
17	3 in.	Economy vibrating bell	<b>\$</b> 3.30	<b>\$</b> 3.00	\$2.30
17	4 in.	Economy vibrating bell	3.50	3.20	2.50
17	5 in.	Economy vibrating bell	5.60	4.72	4.20
17	6 in.	Economy vibrating bell	6.00	4.90	4.40
17	7 in.	Economy vibrating bell	8.80	6.80	6.00
17	8 in.	Economy vibrating bell	10.50	8.70	7.70
17	10 in.	Economy vibrating bell	16.80	13.70	12.20
17	12 in.	Economy vibrating bell	20.50	18.00	16.00

Delivery F. O. B. New York City. For warehouse deliveries write nearest house OQLC

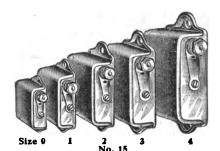
### **BELLS AND BUZZERS** DIRECT CURRENT







No. 14 5 Inch to 12 Inch



The Lungen Bell

This is a very high grade iron box bell and buzzer. It has been made continuously in the various sizes for a period extending over 30 years. As the hammer rod is so shaped that the opening through which it passes in the side of the case is only slightly larger than the size of the rod, it may justly be described as a dust and insectproof bell. It is worthy of notice that this is the only type bell in which the standard size of 1 inch gong can be obtained.

LUNGEN NO. 13-3 OHMS

Schedule "E"

Specifications Compact, positive acting, durable, insectproof.

(a)—Cover and base formed steel. (b)—Unit hammer rod and armature. (c)—Pivoted armature. (d)—Small hammer rod channel. (e)—Heavy spring nut adjustment. (f)—Brass gong heavily nickeled. -Ribbed edges, spring cover.

Finish, one inch size, all nickel; other sizes, enameled base, nickel gong and cover.

List No		361365	361366	361367	<b>361368</b>	361369
Sizes	1 in.	1¾ ins.	2 ins.	2½ ins.	3 ins.	4 ins.
*List Price	<b>\$</b> 1.80	<b>\$</b> 1.62	<b>\$</b> 1.66	<b>\$</b> 1.26	<b>\$</b> 1.35	\$1.80
Standard Package	6	6	6	12	12	12
Fancy Gongs				<b>\$</b> 1.62		

Sizes may be assorted in quantity of 12 to make standard package. Special finishes—prices on application. Special resistance prices furnished on application.

#### LUNGEN NO. 14—4 OHMS

Schedule "E"

Characteristics and specifications, the same as No. 13, except as follows:
(a)—Base, cast. (e)—Screw and locknut adjustment. (f)—Cast bell-metal gong.

In 5 and 6 inch case, japanned; gong and binding post, nickel; the other sizes, gongs and binding posts, polished bronze.

361374 List No...... 361370 361371 361372 361373 361375 361376 6 ins. . 12 ins. Sizes..... 5 ins. 7 ins. 8 ins. 9 ins. 10 ins. \$7.20 \$15.30 \$17.10 **\$22.50** \$27.00 \$31.50

Special finishes—prices on application. Special resistance prices furnished on application.

#### The Lungen Buzzer LUNGEN NO. 15-3 OHMS

**Specifications** 

Schedule "E"

Cover and base formed sheet steel. Pivoted armature. Spring nut adjustment. Ribbed edge spring cover. Positively dust and insectoroof

I OBIU	ively dust a	ma meccopiooi.					
List	•	—Outside Dime	ensions, Not Including	Binding Posts-		Std.	*List
No.	Size	Length Inches	Depth Inches	Width Inches		Pkg.	Price
360116	0	15/8	11/8	1/2		12 <sup>°</sup>	\$1.62
360117	1	21/8	1 <del>/\$</del>	5/8		25	1.17
360118	2	$2\frac{3}{16}$	1 3 1/4	3/4		12	1.44
360119	3	3 ~	2	$\frac{i}{\lambda}$	_	12	1.53
360120	4	31/2	21/4	1∯	,	12	1.62

Assortment of 25 permitted to make standard package.
Standard finish No. 0 full nickel, larger sizes japanned base, nickel cover.

Special finishes—prices on application.

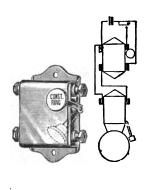
Special resistance prices furnished on application.

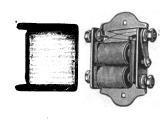
<sup>\*</sup>Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

## **BELLS AND DROPS**

DIRECT CURRENT







No. 26

No. 112

## Circuit Closing Devices CONSTANT RINGING BELL NO. 27-4 OHMS

Schedule "E"

#### Specifications

Cover, lever and binding posts, nickel. Japanned base.

#### Operation

When the circuit is closed the lever drops, throwing the bell into direct circuit with the battery, which causes the bell to ring until the circuit is broken by raising the lever.

causes inc	ben to ring ditti the offent is broken by raising the level.	
List	Sizes	
lo.	Inches	
27 Bell	$2\frac{1}{2}$	
7 Bell	3	
7 Bell	4	
7 Bell	5	
27 Bell	6	
or Deff	· · · · · · · · · · · · · · · · · · ·	

Schedule "E"

7

#### Operation

CONSTANT RINGING DROP NO. 26-4 OHMS

Is used on main line. Closing the circuit drops the lever, thus closing the local circuit and causing a bell to ring continuously until the lever is raised. Furnished also for magneto, wound to 80 ohms, and as an indicating buzzer.

List		Std.	*List	
No.	•	Pkg.	Price	
26B	For battery, nickel finish	6	<b>\$2.25</b>	
26M	For magneto, nickel finish, 80 ohms	6	3.15	
26X	Indicating buzzer, nickel finish	6	3.15	
Assortment of B, M and X permitted to make standard packages.				
Q <sub>n</sub>	paid registance prince furnished on application			

Special resistance prices furnished on application.

#### RELAY NO. 112-10 OHMS

#### Schedule "E"

This relay is designed to meet the demand for a reliable relay for the handling of small currents. At an extra cost magnets can be wound to any resistance up to 600 ohms. The contacts and clearances are designed to take care of current equal in value to one ampere at 20 volts or 20 watts.

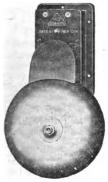
#### Specifications

Nickel finish. Japanned base. Pure silver contact points; phosphor bronze springs. Used for closing external or secondary circuits. Std. \*List List Pkg. No. Price 112 Relay..... **\$**2.70

Special resistance prices furnished on application.

\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

### SIGNAL GONGS ALTERNATING OR DIRECT CURRENT



No. 133 Weatherproof Gong



No. 133 Full Grid



No. 1331

#### Electro-mechanical Bells

These bells are dust, insect, moisture and weatherproof, or non-weatherproof if for interior use. The method of operation is: The hammer upon being released makes a full revolution, passing under the gong to an inclined plane, where it is raised and permitted to strike the gong with great force gathered in the revolution. The recoil causes it to drop and become locked in its normal position under the gong. As the full force of the blow is spent on the gong, there is no strain on the mechanism. The operation, through an eccentric, produces positive action and requires but a small amount of current. Either open or closed circuit, and can be arranged to operate as a single stroke or constant ringing gong, or to ring continuously until run down upon make or break of circuit. It can also be arranged to operate on 110 volt A.C. or D.C. circuit.

#### WEATHERPROOF NO. 133-5 OHMS

Red enamel for fire alarm purposes, but can be furnished in black. Resistance up to 10 ohms furnished without extra charge. Capacity, 350 blows to each winding. Either open or closed circuit, and can be arranged to operate as a single stroke or constant ringing gong or to ring continuously until run down.

No.		Inches	Price
133	Weatherproof type	6	<b>\$4</b> 8.38
133	Weatherproof type	8	49.62
133	Weatherproof type	10	52.24
133		12	57.12
133	Weatherproof type	14	66.74
133	Weatherproof type	15	71.86
133	Weatherproof type	16	123.84
133	Weatherproof type	18	133.20
1	for prices of gridded hells add to list of No. 133 the following:		

For prices of gridded bells add to list of No. 133 the following:

Size	Full Grid [[	Size	Full Grid
6 inches	\$10.80	10 inches	\$24.00
8 inches	16.20	12 inches	31.80

In ordering, add letter "G" to No. of bell.

## CONDUIT BELLS-NO. 1330-1331-5 OHMS No. 1330 Bell for Use With Concealed Conduit

No. 1331 Bell for Use With Surface Conduit

This is a recent design which permits of operation on exceedingly small current flow. The mechanism is entirely insulated from the case. Connectors for line wires are at side in conduit box where they are most accessible, as the entire upper half of conduit box may be removed by taking out two screws. It is ordinarily furnished with one opening for ½ inch conduit, but can be supplied with opening for ½ inch or ¾ inch conduit on back or with two in sides of conduit box. Capacity, 350 blows to each winding.

List	Sizes	*List    Lis	st Sizes	*List
No.	Inches	Price   No	o. Inches	Price
1331	6	\$48.74   133	31 14	\$67.50
1331	8	50.00   133	81 15	
1331	10	52.50   <b>13</b> 3	31 16	135.40
1331	12	57.50    133	81 18	

Standard finish, red enamel. Black enamel can be furnished if specified. For concealed conduit special box is required which is furnished without extra charge. Resistance up to 40 ohms furnished without extra charge. In ordering always specify voltage of operating current.

\*Note: In ordering concealed type add Letter "C" to list number

Schedule "R"

Google Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

#### SIGNAL BELLS AND GONGS DIRECT CURRENT





The Vigilant Single Stroke

No. 21

No. 20-6 Ohms

Schedule "E" Magnets and armature are so arranged that the armature is strongly attracted from a considerable distance, giving the hammer a long sweep and a powerful blow.

Striker: The hammer is attached to the hammer rod by a strong flat spring, causing a quick recoil, resulting in clear and distinct signals; tension and strength of blow are adjustable.

Single Stroke: Single stroke bells can be wound to operate on direct current up to 500 volts.

Vibrating: Vibrating bells are furnished up to 110 volts direct current.

Finish: 2½ inch to 6 inch bells, japanned base; all other parts nickeled. Larger than 6 inch, japanned base; other parts polished brass.

•	_	-		*List Price	I				List Price
List	Sizes	List Price	List Price	Combination	List	Sizes	List Price	List Price	Combination
No.	Ins.	Single Stroke	Vibrating	S. S. & Vib.	No.	Ins.	Single Stroke	Vibrating	S. S. & Vib.
360175‡	$2\frac{1}{2}$	<b>\$</b> 7.8 <b>7</b>	<b>\$</b> 9.24	\$10.55	360182‡	9	<b>\$26.62</b>	<b>\$28.62</b>	<b>\$</b> 30.00
360176‡	3	8.12	9.47	10.78	360183‡	10	32.50	35.12	36.50
360177‡	4	8.62	10.00	11.22	360184‡	12	44.50	47.12	48.50
360178‡	5	13.87	15.24	16.50	360185‡	14	54.38	57.64	59.00
360179‡	6	15.74	17.12	18.37	360186‡	16	114.00	117.24	118.62
360180‡	7	17.62	19.00	20.24	360187‡	18	129.62	133.00	134.24
3601811	8	19.62	21.62	<b>2</b> 3.00	•				

In ordering always state voltage of operating current.

For special resistance, see table of additions on special page that follows. ‡ In ordering single stroke type use letter "s" after list number, use "v" for vibrating type and "ssv" for single stroke and vibrating type.

The Covered Vigilant

No. 21-6 Ohms Schedule "E" Characteristics and specifications same as No. 20 (above), except that it is encased to protect it from

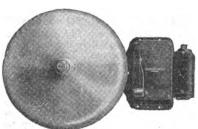
weather,	dust, bu	igs, and ot	her interieren	ce.					
360188‡	21/2	\$11.12	<b>\$</b> 12.37	\$13.12	360195‡	9	<b>\$27</b> .24	<b>\$</b> 29.24	<b>\$29.86</b>
360189‡	3	11.36	12.74	13.37	360196‡	10	35.86	<b>37</b> .89	38.62
360190‡	4	11.87	13.25	13.87	360197‡	12	47.50	50.12	<b>50</b> .86
360191‡	5	17.12	18.50	19.12	360198‡	14	57.50	59.50	61.20
360192‡	6	19.00	20.36	20.60	360199‡	16	117.50	120.12	<b>120</b> .86
360193‡	7	<b>20</b> .86	22.12	22.74	360200‡	18	132.50	135.12	135.74
360194‡	8	22.88	24.86	25.52	·				

In ordering always state voltage of operating current.

For special resistance, see table of additions on special page that follows.

‡ In ordering single stroke type use letter "s" after list number, use "v" for vibrating type and "ssv" for single stroke and vibrating type.

## No. 21 F. P. Electric Single Stroke Alarm Bell Schedule "R"



No. 21 F. P.

A special form of the well-known Edwards Vigilant Electric Single Stroke Bell. Designed especially to meet requirements of Fire Prevention laws.

Direct Acting; no loss of power through compound levers or heavy retracting springs and is therefore highly efficient. No winding ever required.

Heavy Hammer; long stroke. Fully protected; it is weather, dust and bugproof. Separable conduit fitting, drilled and tapped top and bottom for ½ inch conduit (¾ inch if desired) so that conduit work may be completed and wire pulled in; bells may be attached at any time by machine screws supplied with them. Best results obtained by mounting bell with gong to the left. Finish, red enamel.

For use with surface conduit.

	List No. 21FP 6 In	nch	<b>\$</b> 18.00
List No. 21FP	8 Inch		22.50
List No. 21FP	10 Inch		27.00
List No. 21FP	12 Inch		33 75

Delivery F. O. B. Factory, New York, N. Y. For warehouse deliveries write nearest house.

# SIGNAL BELLS AND GONGS Recti Bells

#### GENERAL DESCRIPTION

The Recti Bell meets with well-deserved success the demand for a rugged and powerful vibrating bell of lasting durability and of the most rigid construction, for weatherproof use. Of the various styles the No. 100 can be supplied to operate on either battery or higher voltages up to 225 volts direct current. And in sizes 4 to 10 inches, it can be arranged for operation on alternating current voltages 18 to 220, 25, 40 or 60 cycles, single phase. The No. 100A is particularly adapted to electric vehicle service. The No. 217 Recti is for operation on Direct Current Voltages, 250 to 600 directly on the line without external resistance, and operation under any of the foregoing conditions is guaranteed. When used on high voltages they are intended for intermittent service.

Special attention is invited to the action of the hammer, which, unlike any other bell, operates in a straight line, giving a direct blow; and as one end of the solid brass hammer rod is supported by a swinging joint, and the other end passes through the case, it is always secure, and can not get out of order.

Another positive improvement is that carbon is used for contact points. Thus the points can not corrode or oxidize, will not melt and will outwear platinum or other metal. May be replaced without taking the bell apart.

#### SPECIFICATIONS

Heavy cast japanned box with oil-soaked felt gasket enclosing mechanism; direct-acting straight line hammer rod; magnets impregnated with moisture-resisting compound; contacts extra heavy, and in No. 100 sizes 5-inch and upward carbon contacts are made from standard size carbon rod; phosphor bronze springs, best grade cast bell metal gongs. Types shown are adapted for fire alarms, automobiles, factories, signal systems, mine or marine use. The mechanism is entirely insulated from the case, which is not, at any time, a part of circuit.







No. 100

#### RECTI NO. 100-3 OHMS DIRECT CURRENT

Volts	LIST PRICES												
D. C.	3 In.	4 In.	5 In.	6 In.	7 In.	8 In.	9 In.	10 In.	12 In.	14 In.	15 In.	16 In.	18 In:
											\$100.64		
7 to 25													
26 to 50													
51 to 100													
110 to 120	13.30	13.80	21.90	23.66	<b>25</b> .88	<b>27</b> .82	<b>36.7</b> 6	<b>3</b> 5.38	47.10	56.12	104.62	112.74	129.58
150 to 220	19.50	20.26	29.26	31.12	33.38	<b>35</b> .26	44.92	42.10	54.30	63.44	114.38	124.44	141.52

Special resistance, see table of additions on page that follows. Each bell up to 12 inch size packed in corrugated paper carton. Platinum contacts any size bell, special.

### RECTI BUZZER No. 220A AND 220B

List		*List
No.		Price
220A 220A 220A 220B 220B	With silver contacts, $4\frac{1}{2} \times 3\frac{1}{8} \times 2\frac{1}{8}$ .  With carbon contacts.  For alternating current.  With carbon contacts, $6 \times 4\frac{1}{2} \times 2\frac{3}{4}$ .  For A.C. operation.	8.78 15.00 11.94

For remainder of Bell line see the following pages of this section.

\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

#### RECTI BELLS DIRECT CURRENT









No. 217

No. 1001 Conduit Type No. 100A Automobile Type

## Recti Underwriter Type No. 100U, 3 ohm Bell Schedule "E"

Specially designed for and approved by National Board of Fire Underwriters, for use on sprinkler systems and on all voltages up to 250 volts.

List	*!	List Price	List	*	List Price	List	•	List Price
No.	Size	Each	No.	Size	Each	No.	Size	Each
100U	3 inch	<b>\$</b> 9.16	100U	7 inch	<b>\$</b> 20.06	100U	12 inch	<b>\$41.08</b>
100U	4 inch	9.66	100U	8 inch	22.08	100U	14 inch	<b>50.20</b>
100U	5 inch	15.80	100U	$9$ inch $\dots$		100U	16 inch	105.40
100U	6 inch	17.88	100U	10 inch	37.04	100U	18 inch	119.82

Special resistances same as No. 100.

#### Recti High Voltage Type No. 217

Schedule "E"

Long, quick break contacts, slate base mounting, operates gong up only. Suitable for use on direct current up to 600 volts. For intermittent service. Not made weatherproof.

Volts	Sizes: 6 Inches	8 Inches	10 Inches	12 Inches	14 Inches	16 Inches	18 Inches
220 to 299	\$37.82	<b>\$</b> 42.10	<b>\$</b> 55 . 52	<b>\$</b> 68.32	<b>\$</b> 85.40	<b>\$</b> 136.70	<b>\$</b> 158.38
300 to 499	46.36	51.24	62.84	75.64	93.34	139.92	175.32
500 to 600	50.64	54.30	67.72	79.30	97.00	143.36	168.66

Recti Conduit Types No. 1001

A special receptacle for conduit is secured to the Recti case. In the Type 1001 openings are at the top and bottom.

Voits	6 in.	8 in.	10 in.	12 in.	14 in.
Up to 6	<b>\$</b> 23.88	<b>\$2</b> 8. <b>0</b> 8	<b>\$</b> 34.40	<b>\$44</b> .96	<b>\$</b> 54.16
7- 25	25.76	29.96	36.52	45.40	56.60
26- 50	27.38	31.60	38.44	49.84	<b>5</b> 9. <b>04</b>
51-100	30,00	34.20	39.90	51.66	60.88
110-120	29.62	33.82	39.66	51.36	<b>5</b> 9.78
150-220	37.12	33.56	46.36	<b>46.36</b>	67.40

Conduit Types No. 1001AC

The Recti Bell fitted with conduit attachment for operation on alternating current.

Size Inches	Volts	Cycles	*List Price Each	Size Inches	Volts	Cycles	*List Price Each
4	18-110	25-40-60	\$21.88	8	110	25-40-60	<b>\$35.32</b>
4	220	25-40-60	29.00	8	220	25-40-60	42.16
5	30-110	25-40-60	35.00	9	110	25-40-60	50.06
5	220	25-40-60	35.38	9	220	25-40-60	<b>57.46</b>
6	30-110	25-40-60	31.00	10	110	25-40-60	53.88
6	220	25-40-60	37.72	10	220	25-40-60	60.94
7	110	25-40-60	33.80	12	110	25-40-60	71.40
7	220	25-40-60	40.52	12	<b>220</b> -	25-40-60	<b>78.32</b>

#### Recti Automobile Type No. 100A Schedule "E"

The sizes generally used are 5, 6, 7, 8 or 10 inches, and to operate on a direct current from either primary or storage batteries.

In ordering, be particular to state the voltage of battery they are to work on.

General voltages for automobile bells are 22, 44 or 88 volts.

List	Size	_	*List	n	List	Size	*List	List	Size	*List
No.	Inches		Price	Ш	No.	Inches	Price	No.	Inches	Price
360142	5		<b>\$15.80</b>	11	360144	7	 \$20.02	360146	10	<b>\$</b> 37.04
3601 <b>43</b>	6		17.88	- H	360145	8	 22.08	360147	_d2	41.09

\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house. 41 & 42

## RECTI BELLS AND GRIDS





No. 100AC

No. 219

## Recti-Alternating Current Type No. 100AC SINGLE PHASE, 25, 40 OR 60 CYCLES; CARBON CONTACTS

A loud ringing, vibrating bell for operation direct on alternating current up to 220 volts, 25 to 60 cycles. For Operation on List No. Sizes in Inches For Operation on List Price Each List Price Each 220 Volts 100AC. 18 to 110 Volts \$17.48 **\$**24.62 100AC. 5 30 to 110 Volts 29.06 220 Volts 30.30 ĕ 220 Volts 32.66 30 to 110 Volts 31.88 100AC. 7 34.62 220 Volts 34.90 100AC. 110 Volts 110 Volts 110 Volts 220 Volts 220 Volts 8 37.42 41.70 37.10 100AC. 9 100AC. 48.92 100AC. 10 110 Volts 220 Volts 48.9456.02220 Volts 12 110 Volts 65.48 73.44 100AC.

> -3 Ohms Recti-Underdome No. 219-Schedule "E" DIRECT CURRENT

The Recti movement covered by gong List No. Sizes Inches Sizes Inches List Price Each | List No. List Price Each 12 219 6 \$17.88 219 \$41.08 219 219 7 14 50.2020.06 21922.08 16 219 8 105.42219 219 18 9 30,30 119.82 219 10 37.04

For special resistance, see table of additions on special page that follows. For higher voltages, prices same as Recti No. 100.

For general description of the "Recti" Bell, see preceding pages. In ordering, state frequency as well as voltage of operating current.







Grids for Recti Bells

Schedule "E"

It is sometimes considered necessary to have additional protection for bells to prevent the maliciously inclined from tampering with the hammer rod or from breaking the gong, or so deadening the sound that it would not be heard. For this purpose the "Part Grid" or "Full Grid" is furnished.

Any Recti type bell, except the No. 219, can be furnished with "grids."

In ordering, add to List No. the initials "P. G." for part grid, or "F. G." for full grid.

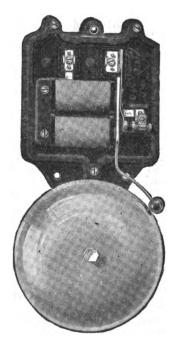
Sizes	<b>.</b>	*Add to List Price of Bell	Part Grid	Full Grid
4 in.	Recti		<b>\$</b> 1.50	
5–6 in.	"		2.26	\$13.50
7–8 in.	4.		3.76	20.26
9–10 in	. "		4.50	30.00
12 in.			6.00	32.34
14 in.	• •	***************************************	6.00	
15 in.	"	***************************************	12.50	
16 in.			16.24	••••
18 in.	44	• • • • • • • • • • • • • • • • • • • •	~26.94 T	

Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

#### EDWARDS TRANSFORMER BELLS







No. 510. (Cover Removed)

### Edwards No. 510 Transformer Bell

The Edwards No. 510 Transformer Bell is a loud ringing bell ranging in size from 5 to 12 inches. It is designed for operation on low voltage transformers of limited capacity, and is not intended for operation on battery circuits. It is highly recommended for use where a loud reliable signal is required.

The field and cores are of laminated construction.

These bells are of the enclosed (or protected) type, and can be furnished with a rubber gasket making them weatherproof. Two wire entrances are provided, one at the top for surface wiring, and one at the back for concealed work. These entrances are sealed with wax which may be removed from either entrance desired. The armature is a vibrating reed type, which combined with the special field and core construction gives a powerful blow, producing the greatest volume of sound with remarkably small current consumption.

Current carrying parts are insulated from the frame, and the bell may be mounted on metal without any danger of ground or short circuit.

Any number of bells may be operated from one transformer.

Standard winding 8 to 18 volts, 60 cycles A.C.

Other voltages and frequencies can be furnished.

List No.	Size	Description	List Price Each
510	5 in.	Transformer bell	\$14.40
510	6 in.	Transformer bell	15.90
510	7 in.	Transformer bell	18.30
510	8 in.	Transformer bell	19.80
510	10 in.	Transformer bell	35.40
510	12 in.	Transformer bell	44.26

Delivery F. O. B. New York. For warehouse deliveries write nearest house.

Sizes may be assorted to make quantity value. Will be furnished in W. E. labeled cartons.

#### THE EDWARDS RIOT BELL "Motor Driven" Bells

An absolutely new principle—a very powerful quick responding, loud ringing, weatherproof, revolving stroke bell—bells that obtain all the sound that the gong can produce. A smooth running, high efficiency motor, especially designed for the purpose used. They are designed to operate on battery voltages of 6 and higher, also lighting circuits of 110 volts alternating and direct. The full power of the revolution and its momentum produce a strength of blow never before obtained. No adjustment is needed. No parts to wear out. No gears to stick. No heavy parts to move. Striker is mounted directly on motor shaft.







No. 320 The Liberty Riot Bell



No. 310
The Double Gong Riot Bell

#### NO. 300 GENERAL SIGNAL RIOT BELL

Available wherever a loud ringing alarm or signal bell is desired. For operation on alternating or direct current lighting circuits or battery. The bells are weatherproof and may be used out of doors. Made in sizes 10 to 18 inches for all voltages and frequencies. Furnished for 6 volt battery circuit when not otherwise specified.

List No.	Size Inches	Voltage	List Price	List No.	Size Inches	Voltage	List Price
300	10	6 D.C.	\$119.80	300	15	6 D.C.	\$144.00
300	10	110 A.C. or D.C.	147.60	300	15	110 A.C. or D.C.	172.80
300	12	6 D.C.	122.40	300	16	6 D.C.	151.20
300	12	110 A.C. or D.C.	151.20	300	16	110 A.C. or D.C.	180.00
300	14	6 D.C.	129.60	300	18	6 D.C.	175.60
300	14	110 A.C. or D.C.	158.40	300	18	110 A.C. or D.C.	<b>214.40</b>

#### NO. 320 LIBERTY RIOT BELL

Designed for use on fire fighting apparatus vehicles only. An adaptation of the Riot movement to the engine or locomotive type gong. Replaces the hand operated type of same bell now widely in use. Gives a greater volume of sound than the hand operated bell, and is controlled by the driver from a push button on the steering wheel. It is the different signal so essential to the rapidly moving fire department vehicle. Additional buttons may be placed on other parts of the vehicle if desired, enabling others than the driver to operate the bell. Economical in current consumption, it can be operated on the ignition batteries. Where vehicles are equipped with electric starting and lighting system, the Riot Liberty Bell can be furnished without extra charge to operate on it. This saves the cost of and space for separate battery. Where this type of gong, hand operated, is now used, the Riot attachment can be furnished to fit the gong. By sending gong to the factory, attachment can be applied to best effect.

List No	).	Size Inches	Voltage	List Price
320	Liberty Riot Bell	10	6 D.C.	\$129.60
320	Riot attachment only	<b></b>	 	100 . 80

#### NO. 310 DOUBLE GONG RIOT BELL

For fire engines, ambulances and patrol wagons. The only signal sufficiently different and with clamorousness enough to meet the urgent necessity of fire fighting and emergency vehicles.

They operate on a 6 volt battery by steering wheel push, and produce a far-reaching, effective and entirely different warning of the approach: a rigorous, emphatic demand for the right of way in a tone loud enough and strong enough to be heard at a distance, enabling pedestrians or traffic to keep the way open. An adaptation of the Riot Bell using two gongs and a double striker. The gongs are struck alternately,

and as the gongs are different tones the volume of sound is greatly intensified.

List No.	Size Inches	Voltage	List Price	List No.	Size Inches	Voltage	List Price
310	12	6 D.C.	\$129.60	310	16	6 D.C.	\$158.40
<b>3</b> 10	14	6 D.C.	144.00	310	18	6 D.C.	180.00
310	15	6 D C	151 20	1			

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#### FARADAY BELLS

#### GENERAL OUTLINE OF STANDARD TYPES OF FARADAY SIGNAL GONGS WITH DATA AS TO OPERATIVE CURRENT, ETC.

Faraday Signal Gongs are made in five (5) general types, viz.:

Vibrating (enclosed and skeleton types).

Single Stroke (enclosed and skeleton types). Two-signal Combination Single Stroke and Vibrating (enclosed types only).

Electro-mechanical (enclosed types only).

Magneto-extension (enclosed types only).

#### Vibrating Gongs

Vibrating Gongs will be furnished as ordered to operate from the following sources of energy as may be specified:

(a) Battery Circuits—all voltages (gongs to be wired in multiple).
(b) D.C. Light and Power Circuits—all voltages up to 600 (gongs to be wired in multiple).
(c) A.C. 25-60 Cycle Circuits (12 to 24, 100 to 110, 200 to 220 volts) as follows:

(1) A.C. 25-60 cycle bell-ringing transformer circuits, 12 to 24 volts, single gong patterns
(2) A.C. 25-60 cycle bell-ringing transformer circuits, 12 to 24 volts, single gong patterns up to 12 inches inclusive—double gong patterns up to 18 inches inclusive. (Gongs to be wired in multiple.)

(2) A.C. 25-60 cycle light and power circuits—100 to 110, 200 to 220 volts. (Gongs best wired in series, but may be wired in multiple.)

(3) In series (any number as may be specified not exceeding 10 gongs) on 100-110 volts A.C.

light and power circuits-25-60 cycles.

(4) In series (any number as may be specified not exceeding 20 gongs) on 220 volts A.C. light and power circuits—25-60 cycles.

#### Single Stroke Gongs

Single Stroke Faraday Gongs of standard type (except electro-mechanical patterns) cannot be operated on A.C. circuits; single stroke gongs must have, as a source of current supply, either battery current or D.C. light and power current; single stroke gongs are particularly adapted to code signalling and, of course, are preferable to vibrating gongs for code signalling; single stroke gongs cannot, from the nature of their construction, be counted on to give anywhere near the volume of sound that a continuous ringing vibrating bell can give.

Single Stroke Gongs are best wired in series, but may be wired in multiple.

#### Two (2) Signal Combination Single Stroke and Vibrating Gongs

Two (2) Signal Combination Single Stroke and Vibrating Faraday Gongs, like the single stroke type in preceding paragraph cannot be operated on A.C. current; battery current or D.C. light and power current must be used; special attention is called to the fact that two (2) signal combination single stroke and vibrating gongs draw a much greater amount of current for full normal operation than vibrating gongs of same size, and when operated from battery, ample ampere capacity of the battery set is essential.

Two (2) Signal Combination Single Stroke and Vibrating Faraday Gongs should always be connected in multiple on a 3 wire circuit.

#### Electro-mechanical Gongs

Electro-mechanical Faraday Gongs will be furnished to operate on battery current, A.C. (25-60 cycle) circuits (6 to 220 volts) and D.C. light and power circuits (100 to 600 volts).

Electro-mechanical Faraday Gongs are furnished to operate as specified, for open or closed circuit lines, as follows:

Style 1—Single stroke, for open circuit work.

Style 2—Single stroke, for closed circuit work.

Style 3—Continuous ringing, for open circuit work.

Style 4—Continuous ringing, for closed circuit work.

Style 5—To ring continuously until run down, for open circuit work.

Style 6—To ring continuously until run down, for closed circuit work.

In an Electro-mechanical Faraday Gong, the blow on the gong is struck by a heavy ball on the end of a lever released by the electric current, but operated by a powerful clock-spring.

Electro-mechanical Gongs are designed for use where requirements demand a heavier and more powerful blow than is possible to obtain from an electric signal gong of regular design, or where current for operation of gong must be kept down to a minimum (Faraday Electro-mechanical Gongs can be furnished to operate on a minimum of 60 milli-amperes per gong).

Electro-mechanical Gongs require winding of clockwork spring after 600 or 700 blows have been struck.

Electro-mechanical Faraday Gongs should always be wired in series for most economical operation.

#### Magneto Extension Bells

Magneto Extension Faraday Bells are made for use on telephone A.C. generator circuits of 1634 cycles.

Magneto Extension Faraday Bells should always be connected in series. Electrical House Goods and Novelties

#### SPECIAL RESISTANCE WINDINGS

#### FOR FARADAY AND COMPETITION SKELETON AND FARADAY ENCLOSED-TYPE BELLS AND BUZZERS

List additions shown below apply to Faraday Skeleton, Competition Skeleton, Faraday Enclosed-Type Gongs, Faraday Under-Dome Gongs, Faraday Double-gong Bells, Faraday Electro-Mechanical Gongs and Faraday Buzzers for use on Battery and D.C. circuits—do not apply to A.C.

To obtain the list price of special resistance bells, add the list prices shown below for the desired resistance to the list price of the "regular resistance" bell; from the combined figure thus obtained, standard

discount on bells apply.

'Regular resistance" vibrating bells will operate satisfactorily on battery and D.C. circuits at the voltage shown in table listing various types of bells on other pages, but where gongs are to be operated on highervoltage circuits, or where a number of gongs are to be operated simultaneously in "multiple" on a circuit,

gongs wound to proper higher resistance must be used to obtain satisfactory results.

For D.C. light and power circuits, as well as lower D.C. voltages, data given in table at bottom of page should be used—this table showing approximate ohms' resistance for vibrating bells for various D.C.

voltages.

For vibrating bells resistance given in table below for D.C. circuits may be slightly varied from, in actual practice, without bad results, but the maximum resistances shown for specific D.C. voltages insure minimum sparking at contacts and best results; minimum maintenance expense will be obtained by using the highest resistances shown below for specific voltages.

nless wired in series resistance of single-stroke gongs to be connected to D.C. light and power circuits, should be approximately one-quarter that of vibrating gongs when designed for operation on similar voltages. To operate on low voltage battery, single-stroke gongs are best wired in multiple. Figure resistance by

following formula: R = E<sup>2</sup> + 20.

Faraday Enclosed Type Vibrating Gongs will be furnished, when ordered, wound to 150 ohms to operate direct in multiple on 600 volts D.C. street railway circuits; 600 volt gongs should be used either with Faraday

Resistance Panels or with 5-60 watt lamps, connected as per blueprint attached to each 600 volt gong.

For A.C. bell ringing transformers and A.C. light and power circuits, Transformer Type Faraday Gongs should be used. Listings of transformer gongs cover gongs suitable for connection direct to 18 volt bell ringing transformers and 100 to 240 volt A.C. light and power circuits. It is never desirable to use Faraday Transformer Gongs on less than 18 volts.

Resistances of transformer gongs for A.C. circuits are entirely arbitrary and cannot be figured on the same basis as shown below for D.C. circuits.

For A.C. circuits, Transformer Single-gong Bells, Transformer Under-Dome Gongs, or Transformer Double-gong Bells should invariably be used; all Faraday Single-gong and Under-Dome Transformer Gongs, except double-gong types, are of the "no-contact" non-sparking type; they may be connected in series (when wound to proper resistance for this work) and when so connected, the total number of gongs on the circuit requires no more current than one gong would require in multiple. Particular attention is called to this advantage over other transformer gongs, for the reduced current demand for the operation of the number of gongs, makes possible the use of any first-class contact key of standard design.

Triplex contacts will be furnished when specially ordered, at slight additional cost on all Faraday Vibrating Gongs and Buzzers, except the smallest size on No. 00 frames. Triplex contacts are a guarantee against the failure of a signal gong, for with three (3) independent sets of contacts, one set may break down

or even two sets, without causing the failure of the gong.

Pure platinum is, without question, the most dependable for gong contacts, but where price of platinum seems prohibitive, platinoid will be found satisfactory.

Single stroke and electro-mechanical gongs have no contacts.

List additions for special resistance windings of skeleton bells may be combined with list prices of skeleton bells and likewise list additions for special resistance windings of enclosed type bells (including Underdome gongs, double-gong bells, electro-mechanical gongs and buzzers) may be combined with list prices of these bells to obtain list values determining discounts; however, list additions for enclosed type bells (including under-dome gongs, double-gong bells, electro-mechanical gongs and buzzers) cannot be combined with skeleton bells to make up list values.

Resistance of single-stroke gongs is approximately one-quarter that of vibrating gongs when designed

for operation on similar voltages.

#### OHMS RESISTANCE FOR OPERATION OF FARADAY 'VIBRATING GONGS ON DIRECT CURRENT VOLTAGES WITHOUT EXCESSIVE SPARKING AT CONTACTS

	Adapted to		Adapted to	i	Adapted to		Adapted to
Ohms	Operate on	Ohms	Operate on	1	Operate on		Operate on
Resistance	Following	Resistance	Following	Ohms	Following	Ohms	Following
per Bell	Voltages	per Bell	Voltages	Resistance	Direct Current	Resistance	Direct Current
5	6-10	150	30—35	per Bell	Voltages	per Bell	Voltages
10	1015	200	35—45	350	65— 80	550	110-120
20	1520	250	4555	400	80— 95	1000	120-130
50	20-25	300	5565	450	95—105	2000	220-240
100	2530			500	105110	150	500600
			i	(With Re	sistance Panel or	bank of 5-60 w.	att lamps)

SPECIAL RESISTANCE WINDING-LIST ADDITIONS—PER GONG

	1	1			-Ohms	Resist	ance			
Size Skeleton	Size Enclosed	Frame		51-	101-	151-	201-	<b>3</b> 01-	501-	1001-
Gong	Type Gong	No.	0-10 11-20	21-50 100	150	200	300	500	1000	2000
Not made	134 and 2 ins.	00	\$1.50 \$2.25		\$4.50	\$4.95	\$5.10	\$5 25	\$6.75	\$7.80
Not made	21/2 and 3 ins.	0			4.50	4.95	5.10	5.25	6.75	7.80
21/2, 3, 31/2 and 4 ins.	4 ins.	1	1.80 2.70	3.45 4.80	5.25	5.55	5.70	5.85	7.35	8.40
5 and 6 ins.	5 and 6 ins.	2	3.75 5.25	5.50 5.70	6.00	6.30	6.60	7.65	8.70	10.20
7 and 8 ins.	7 and 8 ins.	l 3	5.25 7.05	8.40 9.15	9.45	9.75	10.65	10.80	10.95	12.15
9 and 10 ins.	9 and 10 ins.	4	7.15 7.90	8.65111.10	111.40	11.70	12.00	12.30	12.60	13.20
12, 14, 15 ins.	12 and 14 ins.	X-5	7.15 7.90	8.6511.10	11.40	11.70	12.00	12.30	12.60	13.20
15, 16 and 18 ins.	15, 16 and 18 ins.	6	18.15 27.45	37.80 39.00	40.20	41.40	42.45	43.80	44,85	46.35

#### FARADAY SKELETON BELLS

#### VIBRATING TYPE, FOR BATTERY CIRCUITS

(Cannot be used on A.C. circuits.)

"High-power" Armature.—Patented "High-Power" armature allows the keeping of armature in magnetic field up to the moment of striking the gong.

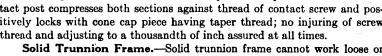
Breakage of Springs Cannot Disable Bell.

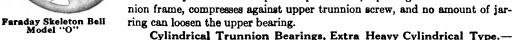
Insulated Mechanism.—Frame of bell carries no current at any time, as entire electrical mechanism is insulated from frame casting. Bells may be mounted on metal without fear of grounding.

Solid Back.—Solid back prevents dampness from getting into insulation washers on back of bell, or affecting magnet windings. All insulation washers sealed in with waterproof wax.

Locking Side-contact Post.—New patented split-section side-contact post compresses both sections against thread of contact screw and positively locks with cone cap piece having taper thread; no injuring of screw thread and adjusting to a thousandth of inch assured at all times.

Solid Trunnion Frame.—Solid trunnion frame cannot work loose or move in any direction. Improved split section, replacing old locknut on trunnion frame, compresses against upper trunnion screw, and no amount of jar-





There is no possibility of armature breaking away from either upper or lower bearing; construction utilizes full strength of both upper and lower trunnion frame casting.

Non-turning Contact and Binding Posts.—Non-turning and non-loosening binding posts equipped with split steel lock-washers prevent connections from ever jarring loose.

Contact Points.—Contact points are made of platinoid or pure platinum, as specified, and are always plainly marked on both screw and spring. Platinoid contacts furnished, unless otherwise specified.

Skeleton Faraday Bells, listed below, are designed to operate on battery circuits only; for bell-ringing transformer circuits, Transformer Skeleton Faraday Bells, Transformer Enclosed Type Single Gong Bells, Transformer Enclosed Type Double Gong Bells, or Transformer Underdome Gongs are recommended; Transformer Skeleton Bells should never be used on electric light and power circuits.

Faraday Skeleton Type Gongs will be furnished single-stroke, when specially ordered, at \$1.00 list additional, but for important single-stroke work the Faraday Single-Stroke Gong is recommended, and the slight advance in price will be found more than justified.

#### PRICE LIST

Lis <b>t</b> No.	Size, Gong Inches	Frame No.	Resistance in Ohms	List Price Each	List No.	Size, Gong Inches	Frame No.	Resistance in Ohms	List Price Each
0-21/2	21/2	1	1.5	\$4.50	O-10	10	4	<b>5.2</b>	\$24.90
0-3	3 -	1	1.5	4.90	O-12	12	X-5	<b>5.2</b>	31.10
0- 4	4	1	1.5	5.47	O-14	14	X-5	<b>5.2</b>	62.16
O- 5	5	2	2.1	9.94	O-15	15	X-5	<b>5.2</b>	80.80
O- 6	6	2	2.1	11.18	OL-15	15	6	8	117.48
0-7	7	3	3	15.93	O-16	16	6	8	124.06
O- 8	8	3	3	17.48	O-18	18	6	8	143.56

Add to above prices for pure platinum contacts, \$1.20 list for bells up to and including 6 inches in diameter; \$2.00 list for bells 7 inches and larger. Add for Triplex Platinoid Contacts, \$4.00 list to above prices.

Add for Triplex Pure Platinum Contacts as follows:

Up to and including 6 inches	\$6.00 list
8 and 10 inch	8.00 list
12 and 14 inch	
15 inch and larger	$15.00  \mathrm{list}$

Note: Faraday Skeleton Bells will be wound, when specially ordered, to any resistance up to 2000 ohms; however, we do not recommend Skeleton Bells for 110, 220 or 500 volts service. For this service, Faraday Enclosed Type Bells (with no exposed terminals), shown on other pages, should be invariably used. For prices, see special listing elsewhere.

Assortment of all sizes Faraday and Competition Skeleton Bells permitted to make up list value, but Enclosed Type Gongs or Buzzers cannot be included with Skeleton Bells; list price additions for special resistance windings may be included with bells and buzzers to make up list value.

Note: The Underwriters' Laboratories approve only the Enclosed Type Bell for signal systems coming under their supervision.

#### BELLS AND BUZZERS

#### COMPETITION SKELETON BELLS, MODEL Z

Competition Model Z Bells differ from the Faraday Model O principally in the following details:

Old style armature in place of "High-power" armature.

Mechanism not insulated from frame casting as in Faraday Model O.

Silver contacts in place of platinoid.

Less accurate trunnion construction and not "solid-back."

Binding posts simply non-turning, in place of Faraday Patented Duplex

Posts, non-turning and non-loosening.

Skeleton Competition Bells, Model Z, listed below, are designed to operate on battery circuits only; for bell ringing transformer circuits, Transformer Skeleton Faraday Bells, Transformer Enclosed Type Single Gong Bells, Transformer Enclosed Type Double Gong Bells or Transformer Underdome Gongs, are recommended; Transformer Skeleton Bells should never be used on electric light and

Skeleton Competition Bells will be furnished Single-Stroke when specially ordered at 50 cents net additional, but for important single-stroke work the special Faraday Single-Stroke Gong shown on another page is recommended, and the slight advance in

cost found more than justified.

List	Size Gong		Resistance	List Price
No.	Inches	Frame No.	in Ohms	Each
Z- 21/2	21/2	1	1.5	\$4.12
Z- 3	3	1	1.5	4.18
Z- 4	4	1	1.5	4.44
Z- 5	5	2	2.1	8.08
7-6	6	2	2.1	8.55
Z- 7	7	<b>3</b> ·	3	13.99
Z- 8	8	3	3	15.29
Z-10	10	4	5.2	21.36
Z-12	12	X-5	<b>5.2</b>	23.80
C1 1 - 1 /	Tamana 4 (4 ( a.u. 10 11 11 11 1	• • • • • • • • • • • • • • • • • • • •	1	:_+ _ 3 3:4:

Skeleton Competition Bells will be wound to any special resistance desired at standard list additions. Assortment of all sizes Competition and Faraday Skeleton Bells permitted to make up list values, but Enclosed Type Gongs or Buzzers cannot be included with Skeleton Bells; list price additions for special resistance windings may be included with bells and buzzers to make up list value.



Nos. 93, 99 and 101 Buzzers, Cover in Position



Mechanism of Nos. 89, 91, 93, 99 and 101 Buzzers



No. 94, Cover Removed

#### FARADAY ENCLOSED TYPE BUZZERS

The Standard Nos. 89, 91, 93, 99 and 101 have the Faraday "High-power" armature; No. 94 Extra Loud, in addition to the "High-power" armature, has a heavy steel ball at the end of the armature rod this steel ball striking on extension of the base frame casting with such force and rapidity as to make the signal three times as powerful as the No. 99 or No. 101.

Models 89 and 91 are the same as the 101 mechanism shown above with no cover; they are intended for interior mounting in annunciators, switchboards, telephone apparatus, etc.; Model 93 is the same mechanism, with standard cover as shown in left-hand cut above, complete with rubber gasket, etc.; the size of

the Models 89, 91 and 93 is so small that they fill a very long-felt want.

Frame of buzzer carries no current at any time, as entire electrical mechanism is insulated from frame casting. These buzzers may be mounted on metal without fear of grounding. Breakage of tension spring will not disable mechanism.

Side-contact adjustment is of patented micrometer-lock type; all working parts are heavily copper-plated against dampness. Magnet coils are waterproof; soft-rubber gasket between frame and cover guards against outside moisture. Triplex contacts will be furnished when specially ordered, and insure the best

contact co	nstruction ever ma	ade.	Kosistanco in	Size	List Price
List No.	Style	Frame No.	Ohms	Inches	Each
89	No Cover	. 00	1.4	1 <del>13</del> x 1 <del>13</del> x1 ½	<b>\$4</b> .95
93	Enclosed	00	1.4	2½ x 2½ x 1 &	5.40
91	No Cover	00 ·	1.4	$2\frac{7}{16} \times 2\frac{7}{16} \times 1\frac{1}{8}$	4.95
99	Enclosed	0	1.4	$3\frac{1}{8} \times 3\frac{1}{8} \times 1\frac{3}{8}$	6.30
101	Enclosed	1	1.5	$4\frac{1}{4} \times 4 \times 2\frac{1}{16}$	7.20
94	Enclosed	1	1.5	$4\frac{1}{4} \times 4 \times 2\frac{1}{14}$	7.65

Faraday Buzzers will be wound to any special resistance desired at standard list additions.

Platinum Contacts: Add to above prices of buzzers for pure platinum contacts, \$1.20 list.

Triplex Contacts: Add to above prices of buzzers for Triplex Platinoid contacts, \$4.00 list; for Triplex Pure Platinum contacts, \$6.00 list.

Triplex contacts not furnished on 89, 91 and 93 buzzers.

#### FARADAY BELLS WITH FANCY GONGS

SKELETON AND ENCLOSED TYPES

VIBRATING—FOR BATTERY CIRCUITS AND D.C. CIRCUITS (Cannot Be Used on A.C. Circuits)



Both Skeleton Faraday and Enclosed Type Faraday Bells are furnished with what is generally termed "fancy gongs" in place of standard round gongs.

Fancy gong equipment is desirable where a different sounding gong is wanted or where a particularly penetrating sound is needed, such as in noisy factory buildings, etc.; the rectangular or cow gong gives the

most penetrating sound of any type of gong made.

These gongs have high power armatures, making it possible to keep the armature in magnetic field up to the moment hammer-tod ball strikes gong in place of opening at contact points at beginning of stroke as all other mechanisms do; breakage of springs cannot disable gong; frame casting carries no current at any time and as the entire mechanism is insulated from the frame, these gongs may be mounted on metal, metal lathing and damp walls without fear of grounding.

Skeleton Faraday Bells listed on this page are designed to operate on battery circuits.

Enclosed Type Faraday Bells are designed to operate on battery and when ordered wound to proper resistance, on D.C. electric light and power circuits from 100 to 600 volts; for A.C. circuits, both bell ringing transformer and 100 to 240 volt A.C. circuits, transformer enclosed type single gong, transformer enclosed type double gong bells are recommended, these being furnished when specially ordered with fancy gong equipment as shown on this page.

These gongs will be furnished single stroke when specially ordered at \$1.00 list additional.

#### SKELETON FARADAY BELLS WITH FANCY GONGS | ENCLOSED TYPE FARADAY BELLS WITH FANCY GONGS With Rectangular or Cow Gongs With Rectangular or Cow Gongs Regular Regular List Size Gong Frame Resistance Price Price Size Gong Frame No. Resistance Inches No. Ohms Each Inches Ohms Each 1¾ x 2½ 2 x 3 \$12.74 13/4 x 21/2 2 x 3 n $1.4 \\ 1.4$ \$9.94 11.18 17.48 1.5 13.01 15.00 15.22 1 × 2 ½ 2 × 3 1 1.5 31/4 x 5 41/4 x 6 23.20 40.64 2.1 ã With Sleigh Gongs With Sleigh Gongs 11/2 x 21/2 1.5 \$9.94 With Garland Gongs With Garland Gongs x 21/4 \$9.72 1.5 1.5 17.06 With Open, Breakfast, Tea or House Gongs With Open, Breakfast, Tea or House Gongs \$9.72 | 2 x 21/4 x 21/4 21/2 x 11/4 1.5

These gongs will be furnished wound to any special resistance desired at standard list additions shown elsewhere.

Skeleton Fancy Gong Bells, listed above, may be combined with regular pattern Skeleton Bells to make up list value; Enclosed Type Fancy Gong Bells likewise may be combined with regular pattern Enclosed Type Bells and Buzzers to make up list value, but Skeleton and Enclosed cannot be combined to make up list value. List price additions for special resistance windings may be included with respective class of bells to make up list value.

Platinum Contacts: Add to above prices for Pure Platinum contacts, \$1.20 list for bells up to and including No. 2 Frame; \$2.00 list for No. 3 Frame.

Triplex Contacts: Add to above prices for Triplex Platinoid contacts, \$4.00 list. For Triplex Pure Platinum contacts, add to above prices the following:
Up to and including No. 2 Frame......\$6,00 list

#### **ENCLOSED-TYPE FARADAY SIGNAL GONGS** Standard Models A, B and C

National Code Standard
VIBRATING—WEATHERPROOF—FOR BATTERY AND D.C. CIRCUITS
(Cannot Be Used on A.C. Circuits)

Faraday Enclosed-Type Bells are recommended whenever the gong is exposed to dust, dampness or mechanical injury. They are used for important signal work by leading railroads, fire alarm companies,

mechanical injury. They are used for important signal work by leading rainbads, me starm companies, etc. The mechanism is protected by a heavy bauer-barff iron case.

Faraday Gongs A, B and C, listed below, are designed to operate on Battery, and when ordered wound to proper resistance, on D.C. electric light and power circuits from 100 to 600 volts; for A.C. circuits, both Bell Ringing Transformer and 100 to 240 volt A.C. circuits, Transformer Enclosed Type Single Gong, Transformer Enclosed Type Double Gong or Transformer Underdome Gongs are recommended.

These gongs will be furnished Single-Stroke when specially ordered at 50 cents net additional.







Model B



Model C

	1110001									
Model No.	Size Gongs Inches				erate on Bat be Wired in			To Operate on 110-125 Volt D.C. Circuits In Multiple,	220-250 Volt D.C. Circuits In Multiple,	
Don't Fail to Specify Model No. and Voltage at Which to Operate	All Gongs Full- Polished Nickel Unless Otherwise Specified	Full-Polished Nickel Unless Otherwise Specified	Frame No. (Size of Mechan- ism)	Number of Dry Cells Required at Gong Terminals for Normal Operation	Operative Voltage at Gong Terminals	Approx. Watt Consumption per Gong	Regular Resistance Ohms for Battery Circuits	List Price Each	No External Resistance Required Wound to 500 Ohms List Price Each	No External Resistance Required Wound to 2000 Ohms List Price Each
1 11/		00 I			1.5	1.4	\$7.05	\$11.20	Not Made	
A-134 A-21/2 A-31/2 A-31/2 A-45 A-5 A-7 A-8 A-7 A-9 A-10 A-14 A-14 A-15 A-16 A-18	134 21/2 31/2 4 5 6 7 8 9 10 12 14 15 16 18	00 00 0 1 1 2 2 3 3 4 X-5 X-5 6 6	222233445556666888	222233445556666888	1.5 1.1 1.1 1.8 1.8 2.2 2.5 2.55 2.55 2.55 2.55 4.	1.4 1.4 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	7.58 8.08 9.29 11.19 11.32 15.80 17.88 20.06 22.08 30.30 37.04 61.73 123.74 129.62 148.82	\$11.20 11.72 12.22 13.42 15.93 16.56 21.90 23.62 25.88 27.82 36.68 43.50 57.90 69.00 132.74 138.62 159.32	Not Made Not Made Not Made \$19.48 20.26 29.26 31.12 33.38 35.26 44.93 51.75 66.75 78.00 140.63 153.00 174.00	
	MOI	DEL "B"	HALF-GRII	O-GUARDE	D GONGS	-3½ INCH	IES TO	14 INCHES		
B- 3½ B- 4 B- 5 B- 6 B- 7 B- 8 B- 9 B-10 B-12 B-14	3½ 4 5 6 7 8 9 10 12 14	1 1 2 2 3 3 4 4 X-5 X-5	3 3 4 4 5 5 6 6 6 6	3 3 4 4 5 5 6 6 6	1.8 1.8 2.2 2.2 2.5 2.5 2.55 2.55 2.55 2.55 2	1.5 1.5 2.1 2.1 3. 3. 5.2 5.2 5.2 5.2	\$13.12 13.39 18.04 20.14 23.80 25.84 34.80 41.53 56.52 67.73		\$20.98 21.76 31.50 33.38 37.12 34.32 49.43 56.25 72.75 84.00	
TECHNA .	MO	DDEL "C	" FULL-GRI	D-GUARD						
C- 5 C- 6 C- 7 C- 8 C- 9 C-10 C-12	5 6 7 8 9 10 12	2 2 3 3 4 4 X-5	4 4 5 5 6 6 6	4 4 5 5 6 6	2.2 2.2 2.5 2.5 2.55 2.55 2.55 2.55	2.1 2.1 3. 3. 5.2 5.2 5.2	\$29.30 31.38 40.31 42.33 60.30 67.04 89.52	\$35.40 37.12 46.13 48.08 66.68 73.50 96.90	\$42.75 44.63 53.63 55.50 74.93 81.75 105.75	

Assortment of all sizes Enclosed-Type Gongs and Buzzers permitted to make up list-value, but Faraday and Competition Skeleton Bells cannot be included with Enclosed-Type Gongs or Buzzers; list price additions for Special Resistance Windings may be included with bells to make up list-value.

Special resistance bells made to order. For prices, see special listing elsewhere.
Platinum Contacts: Add to above prices for Pure Platinum Contacts, \$1.20 list for bells up to and including 6 inch;
\$2.00 list for 7 inch and larger.

Triplex Contacts: Add to above prices for Triplex Platinoid Contacts, \$4.00 net. For Triplex Pure Platinum Contacts add to above prices the following:

Lip to and including 6 inch.

\$6.00 list

12 and 14 inch.

\$10.00 list

15 inch and larger.

Dightzect by

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#### INSPECTORS' PATTERN ENCLOSED-TYPE FARADAY SIGNAL GONGS

Nat. Code Standard VIBRATING-WEATHERPROOF-FOR BATTERY AND D.C. CIRCUITS (Cannot Be Used on A.C. Circuits)







Model Al

Model BI

In Inspectors' Type Models AI, BI, CI, the cover, instead of being held down by four machine screws as in Models A, B and C, fits down onto four brass corner dowel pins, and, while held firmly in place by large nickel plated knurled thumb nut in center of cover, is removable in a second without tools. Models AI, BI and CI were specially designed to permit frequent inspection of signal equipment.

Faraday Gongs AI, BI and CI, listed below, are designed to operate on battery and when ordered wound to proper resistance, on D.C. electric light and power circuits from 100 to 600 volts; for A.C. circuits, both bell ringing transformer and 100 to 240 volt A.C. circuits, Transformer Enclosed Type Single Gong, Transformer Enclosed Type Double Gong or Transformer Underdome Gongs are recommended.

These gongs will be furnished single-stroke when specially ordered at 50 cents net additional. These gongs will be furnished wound to any special resistance desired at standard list additions.

These gongs will be furnished wound to any special resistance desired at standard list additions.

Model No.	Size Gongs Inches		(0	To Ope	erate on B	attery Multiple)		To Operate on 110-125 Volt D.C.	To Operate on 220-250 Volt D.C.	Conduit
Don't Fail to Specify Model No. and Voltage at Which to Operate	All Gongs Full- Polished Nickel Unless Other- wise Specified	Frame No. (Size of Mechan- ism)	Number of Dry Cells Required at Gong Terminals for Normal Operation	Operative Voltage at Gong Terminals	Approx. Watt Consumption per Gong	Regular Resist- ance Ohms for Battery Circuits	List Price Each	Circuits In Multiple No External Resistance Required Wound to 500 Ohms List Price Each	Circuits in Multiple No External Resistance Required Wound to 2000 Ohms List Price Each	Patterns Add to Model No. "P" and Add to Lists in Previous Columns
		MODEL	"AI" NO	N-GUARI	DED GON	IGS-3½	INCHES	TO 18 INCH	IES	For Model
AI- 3½ AI- 4 AI- 5 AI- 6 AI- 7 AI- 8 AI- 9 AI-10 AI-12 AI-14 AI-15 AI-16 AI-18	3½ 4 5 6 7 8 9 10 12 14 15 16 18	1 2 2 3 3 4 4 X-5 X-5 6 6	3 3 4 4 4 5 5 5 6 6 6 6 8 8 8	33445556668888	1.8 1.8 2.2 2.5 2.5 2.55 2.55 2.55 4. 4.	1.5 1.5 2.1 2.1 3. 3. 5.2 5.2 5.2 6. 6.	\$14.92 15.19 19.54 21.64 24.56 26.58 35.56 37.12 55.29 66.98 132.74 138.62 156.32	\$16.28 16.80 25.66 27.38 30.38 32.32 41.93 48.75 63.15 74.25 141.74 147.62 168.32	\$22.48 23.26 33.00 34.88 33.34 34.98 50.18 57.00 72.00 83.25 149.63 162.00 183.00	\$8.10 8.10 8.42 8.42 9.07 9.72 9.72 9.72 9.72 12.96 12.96
D.A. Ja	MOI	DEL "BI	" HALF-GI	RID GUA	RDED G	ONGS-3	1/2 INCHI	ES TO 14 IN	CHES	For Model
BI- 3½ BI- 4 BI- 5 BI- 6 BI- 7 BI- 8 BI- 9 BI-10 BI-12 BI-14	3½ 4 5 6 7 8 9 10 12 14	1 2 2 3 3 4 4 X-5 X-5	3 3 4 4 5 5 6 6 6	3 4 4 5 5 6 6 6	1.8 2.2 2.2 2.5 2.5 2.55 2.55 2.55 2.55 2	1.5 1.5 2.1 2.1 3. 3. 5.2 5.2 5.2 5.2	\$16.72 16.99 21.80 23.88 28.30 30.34 40.06 46.78 61.79 72.98	\$17.78 18.30 27.90 29.62 34.12 36.08 46.43 53.25 69.15 80.25	\$23.98 24.76 35.26 37.12 41.63 43.50 54.68 61.50 78.00 89.25	\$8.10 8.10 8.42 8.42 9.07 9.07 12.96 12.96 12.96 12.96
	M	ODEL "C	I" FULL-C	GRID GU	JARDED	GONGS-	-5 INCHE	ES TO 12 IN	CHES	For Model
CI- 5 CI- 6 CI- 7 CI- 8 CI- 9 CI-10 CI-12	5 6 7 8 9 10 12	2 2 3 3 4 4 X-5	4 4 5 5 6 6 6 6	4 4 5 5 6 6	2.2 2.2 2.5 2.5 2.55 2.55 2.55 2.55	2.1 2.1 3. 5.2 5.2 5.2	\$33.04 35.14 44.81 46.83 65.55 72.29 94.77	\$39.15 40.78 50.63 52.58 71.93 78.75 102.15	\$46.50 48.38 58.13 60.00 80.18 87.00 111.00	\$8.42 8.42 9.07 9.07 12.96 12.96 12.96

#### CONDUIT-PATTERN ENCLOSED-TYPE FARADAY SIGNAL **GONGS**

National Code Standard VIBRATING-WEATHERPROOF-FOR BATTERY AND D.C. CIRCUITS (Cannot Be Used on A.C. Circuits)



Model AP For Conduit Work



For Conduit Work



Model CP For Conduit Work

Faraday Conduit Type Signal Gongs make possible the installation of a signal gong system on the outside of a building or on the inside with positive assurance that no breakdown can occur.

Heavy marine gaskets between conduit box back and bell frame prevent entrance of dampness or

water, and mechanism of gong, connections, etc., is absolutely protected at all times.

Faraday Gongs AP, BP and CP, listed below, are designed to operate on battery and when ordered wound to proper resistance, on D.C. electric light and power circuits from 100 to 600 volts; for A.C. circuits both Bell Ringing Transformer and 100 to 240 volt A.C. circuits, Transformer Enclosed Type Single Gong, Transformer Enclosed Type Double Gong or Transformer Underdome Gongs are recommended.

These gongs will be furnished single-stroke when specially ordered at 50 cents net additional.

These gongs will be furnished wound to any encoded resistance desired at standard list and listings.

These gongs will be furnished wound to any special resistance desired at standard list additions.

Model No.	Size Gongs Inches			To Op (Gongs to i	erate on Ba be Wired in	ttery Multiple)		110-125 Volt D.C. Circuits In Multiple,	To Operate on 220-250 Volt D.C. Circuits In Multiple,
Don't Fail to Specify Model No. and	All Gongs Full- Polished Nickel	Frame No.	Number of Dry Cells Required at Gong		Approx.	Regular Resistance		No External Resistance Required Wound to	No External Resistance Required Wound to
Voltage at Which to Operate	Unless Otherwise Specified	(Size of Mechan- ism)	Terminals for Normal Operation	at Gong	Consump- tion per Gong	Ohms for Battery Circuits	List Price Each	500 Ohms List Price Each	2000 Ohms List Price Each
	MODE	L "ÁP" N	ION-GUAR	DED GON	GS-3½ IN	CHES TO	18 INCH	IES	
AP- 3½ AP- 4 AP- 5 AP- 6 AP- 7 AP- 8 AP- 9 AP-10 AP-12 AP-14	3½ 4 5 6 7 8 9 10 12	1 1 2 2 3 4 4 X-5 X-5	3 3 4 4 5 5 6 6 6	3 3 4 4 5 5 6 6 6	1.8 1.8 2.2 2.2 2.5 2.5 2.55 2.55 2.55 2.55	1.5 1.5 2.1 2.1 3. 5.2 5.2 5.2	\$16.18 16.42 22.82 24.90 27.62 29.64 33.80 45.14 57.54 69.83	\$20.02 20.56 28.92 30.64 33.44 35.38 44.78 51.60 66.00 77.10	\$26.22 27.00 36.28 33.56 40.44 42.81 53.02 59.85 74.85 86.10
AP-15 AP-16 AP-18	15 16 18	<b>6</b> 6 6	8 8 8	8 8 8	4. 4. 4.	6. 6. 6.	134.55 140.42 158.12	143.54 149.42 170.12	151.43 163.80 184.80
BP- 8½ BP- 5 BP- 6 BP- 7 BP- 8 BP- 9 BP-10 BP-12 BP-14	3½ 4 5 6 7 8 9 10 12	1 1 2 2 3 3 4 4 X-5 X-5	3 3 4 4 5 5 6 6 6 6	3 3 4 4 5 5 6 6 6	1.8 1.8 2.2 2.2 2.5 2.5 2.55 2.55 2.55 2.55 2	1.5 1.5 2.1 2.1 3. 3. 5.2 5.2 5.2 5.2	\$17.68 17.92 25.06 27.16 31.36 33.40 42.90 50.85 64.62 75.83	\$21.52 22.06 31.18 32.90 37.18 39.14 49.28 56.10 72.00 83.10	\$27.72 28.50 33.90 40.40 44.69 46.56 57.53 64.35 80.85 92.10
CP- 5 CP- 6 CP- 7 CP- 8 CP- 9 CP-10 CP-12	MOD 5 6 7 8 9 10 12	2 2 3 3 4 4 X-5	FULL-GRI 4 4 5 6 6	5 6 6 6	2.2 2.2 2.5 2.5 2.55 2.55 2.55 2.55	S—5 INCHI 2.1 2.1 3. 3. 5.2 5.2 5.2 5.2	\$36.32 38.40 47.87 49.89 68.40 75.14 97.62	\$42.42 44.15 53.69 55.64 74.78 81.60 105.00	\$44.77 51.65 70.64 63.05 83.90 89.85 113.85

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#### FULL-SCREEN-ENCLOSED FARADAY ENCLOSED-TYPE GONGS

Nat. Code Standard

#### VIBRATING—WEATHERPROOF

#### FOR BATTERY AND D.C. CIRCUITS

(Cannot Be Used on A.C. Circuits)



Model CW Regular Pattern



Model CWP Conduit Pattern

Screen-guarded Faraday Enclosed Type Gongs CW and CWP are, in some places where mechanism, gong, hammer-rod and ball must be protected against external injury, boys throwing stones and nesting of birds, preferable to the cast-grid type housing of C and CP models.

These gongs have high power armatures, making it possible to keep the armature in magnetic field up to the moment hammer-rod ball strikes gong in place of opening at contact points at beginning of stroke as all other mechanisms do; breakage of springs cannot disable gong; frame casting carries no current at any time and as the entire mechanism is insulated from the frame, these gongs may be mounted on metal,

any time and as the entire mechanism is insulated from the frame, these gongs may be mounted on metal, metal lathing and damp walls without fear of grounding.

Faraday Gongs CW and CWP, listed below, are designed to operate on battery and when ordered wound to proper resistance, on D.C. electric light and power circuits from 100 to 600 volts; for A.C. circuits, both Bell Ringing Transformer and 100 to 240 volt A.C. circuits, Transformer Enclosed Type Single Gong, Transformer Enclosed Type Double Gong or Transformer Underdome Gongs are recommended.

These gongs will be furnished single-stroke when specially ordered at \$0.50 list additional, for important single-stroke work the special Single-Stroke Faraday Gongs shown on other pages are recommended and the slight advance in cost found more than justified

slight advance in cost found more than justified.

These gongs will be furnished wound to any special resistance desired at standard list—additions shown elsewhere.

Note: The Underwriters' Laboratories approve Enclosed Type Faraday Gongs CW and CWP for signal systems coming under their supervision.

			Mode	I CW	Model CWP		
Size			Regular	Pattern	For Cond	uit Work	
Gong Inches	Frame No.	Resistance Ohms	Model No.	List Price Each	Model No.	List Pree Each	
5	2	2.1	CW- 5	\$29.30	CWP- 5	\$36.32	
6	2	2.1	CW- 6	31.38	CWP- 6	39.68	
7	3	3	CW- 7	40.31	CWP- 7	49.42	
8	3	3	CW- 8	42.33	CWP- 8	49.89	
9	4	<b>5.2</b>	CW- 9	60.30	CWP- 9	68.40	
10	4	<b>5.2</b>	CW-10	66.74	CWP-10	75.14	
12	X-5	5.2	CW-12	89.52	CWP-12	97.62	

Assortment of all sizes Enclosed Type Gongs and Buzzers permitted to make up list value, but Faraday and Competition Skeleton Bells cannot be included with Enclosed Type Gongs or Buzzers; list price additions for special resistance windings may be included with bells to make up list value.

Platinum Contacts: Add to above prices for Pure Platinum contacts, \$1.20 list for bells up to and including 6 inch; \$2.00 list for 7 inch and larger.

Triplex Contacts: Add to above prices for Triplex Platinoid contacts, \$4.00 list. For Triplex Pure

Platinum contacts, add to above prices the following:

Up to and including 6 inch	1	\$6.00 list
8 and 10 inch	• • • • • • • • • • • • • • • • • • • •	\$6.00 list 8.00 list 
12 inch	110	Digitized by Outs SIC

#### SINGLE-STROKE FARADAY SIGNAL GONGS

#### ENCLOSED AND SKELETON TYPES FOR BATTERY AND D.C. CIRCUITS

(Cannot be used on A.C. Circuits)



Model "AS" Single-Stroke En-closed Type, with Multiple Gear

Ğ



Model "BS" Single-Stroke En-closed Type, with Multiple Gear



Model "CS" Single-Stroke En-closed Type, with Multiple Gear



Model "OS" Single-Stroke Skel-eton Type, with Multiple Gear

"SINGLE-STROKE" GONGS—ENCLOSED TYPES—"AS," "BS" AND "CS"
"AS," "BS" and "CS" Gongs are the most powerful and longest movement single-stroke gongs made—see mechanism cut on page showing "AH" Models.

cut on page showing "Ali" Models.

These enclosed types are far superior to skeleton types, and the use of the open-skeleton type should be limited to work where expense is the controlling factor, not long service and reliability.

The wonderfully long stroke of this gong is very similar to a powerful electro-mechanical gong, but, having no clockwork mechanism, of course requires no winding up, as does the electro-mechanical type.

Semi-flexible recoil-type hammer-rod guarantees a clear, unmuffled blow on gong, with never a double stroke possible—a most valuable advantage over the usual hammer-rod construction of other makes.

Single-stroke gongs are best connected in series (unlike vibrating gongs), but may be connected in multiple, if for some special reason multiple connection is necessary.

special reason multiple connection is necessary.

MODEL "AS"

(No Guard Over Gong) MODEL "BS" MODEL "CS" (Half-guarded Gong) Size List (Full-guarded Gong) Size List Sise List Gong Gong Frame Resistance Price Price Gong Ins. Each Ohms Each Ins. Ins. Each Each \$15.19 19.54 21.64 24.56 26.58 36.30 48.04 56.04 67.73 146.24 152.12 169.81 \$16.99 16.99 21.80 23.88 28.30 30.34 40.80 47.53 62.50 73.73 \$33.04 567 5 6 7 8 9 10 12 14 15 46 18 2.1 3 3 35.14 44.80 46.83 66.30 3 6 7 8 9 3 89 2222 73.04 95.52 10 12 5 5 5 8 10 -5 -5 73.73 ŏ

COMBINATION SINGLE-STROKE AND VIBRATING GONGS
ENCLOSED TYPES "AVS," "BVS," "CVS"

Models "AVS," "BVS" and "CVS" have hammer-blow type mechanism and three terminal binding-posts; they should be wired up to a three-wire circuit and should always, of course, be connected in multiple; when this is done, gongs may be operated, both single-stroke and vibrating at will; the operation of these gongs is perfect for both vibrating and single-stroke; they are like cuts, except that they have two (2) additional terminals on the outside of base-castings.

	B	MODEL "AVS"	1		. "BV8"	MODEL "CV8"		
	(No	Guard Over Gong		(Half-gua	rded Gong)	(Full-guarded Gong)		
Sise			List	Size	List	Size	List	
Gong	Frame	Resistance	Price	l Gong	Price	Gong	Price	
lns.	No.	Ohms	Each	Ins.	Each	Ins.	Each	
4	1	1.5	\$14.16	4	\$15.66	l	· • • • •	
5	2	2.1	21.80	5	24.04	]] 5	<b>\$</b> 35.30	
6	2	2.1	23.88	6	<b>26.14</b>	1 6	37.38	
7	8	3	26.80	7	30.56	1 7	47.06	
8	8	3	29.58	l 8	33.32	8	49.83	
9	4	5.2	40.05	9	44.55	j 9	70.05	
10	4	5.2	46.89	10	51.29	10	76.79	
12	X-5	5.2	59.79	12	66.27	12	99.27	
14	X-5	5.2	71.48	14	77.48	II		
15	6	8	153.74	l		l		
16	6	8	159.52	i		ll		
10	•	ō.	177 49			li .		

#### SINGLE-STROKE GONGS--SKELETON TYPE--"OS"

Skeleton type single-stroke gongs are not recommended except where limitation of expense is controlling factor; the mechanism of these skeleton type gongs is, however, well made and same are still used, though enclosed types listed at top of page are preferable.

l bugo m. o	Sise		Regular	List II	1	Size		Regular	List
Model	Gong	Frame	Resistance	Price	Model	Gong	Frame	Resistance	Price
No. OS-4	Inches	No.	Ohma	Each	No.	Inches	No.	Ohms	Each
08-4	4	1	1.5	\$9.07	OS-10	10	4	5.2	\$30.90
OS-5	5	2	2.1	14.44	OS-12	12	X-5	5.2	37.10
O8-6	6	2	2.1	15.68	OS-14	14	X-5	5.2	62.16
OS-8	•	2	2	10 06 1					

Skeleton Single-Stroke Bells listed above, may be combined with regular pattern Skeleton Bells to make up list value; Enclosed Type Single-Stroke Bells likewise may be combined with regular pattern Enclosed Type Bells and Buzzers to make up list value. List price additions for special resistance windings may be included with respective class of bells to make up

iss value. List price additions to specific spec

#### UNDER-DOME FARADAY ENCLOSED-TYPE GONGS

National Code Standard

#### VIBRATING—WEATHERPROOF: FOR BATTERY AND DC CIRCUITS

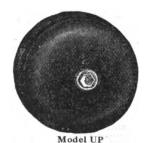
(Cannot Be Used on AC Circuits)



Model U Regular Pattern



Mechanism of Under-Dome Bell



For Exposed Conduit Work Model "UFP" For Flush Conduit Work

These gongs are far superior to projecting-neck type of signal-gong heretofore almost universally used. The entire mechanism of an Under-Dome Gong, including hammer rod and ball, are within the gong, completely housed and protected; nothing can possibly injure or derange the mechanism and, in addition, the design of the Under-Dome Faraday Gong lends itself to the requirements of building work, i.e., that the gong shall not in any way mar the general building lines.

The clean, graceful lines of the design harmonize with surrounding interiors to a degree that was never

possible in the old-style projecting-neck type of gong.
Under-Dome Faraday Gongs are regularly furnished in bauer-barff all over, i.e., gong and base; when specially ordered, will be furnished at slight additional cost, in any color to match walls or decorations.

Under-Dome Faraday Gongs have the following advantages in mechanism, viz.:
(a) Patented "High-Power" armature allows the keeping of armature in magnetic field up to the moment of striking the gong—twice the power of any other mechanism made, because contact points do not open or cut off current till the end of stroke.

(b) Bronze-steel power-multiplying gears between armature and hammer rod.

(c) No springs can break to stop operation of gong.
(d) Frame-casting of bell carries no current at any time, as entire electrical mechanism is insulated.

Faraday Bells may be mounted on metal without fear of grounding.

Under-Dome Faraday gongs models U, UP and UFP, are designed to operate on battery preferably not less than 50 ampere capacity, and when ordered wound to proper resistance, on D.C. electric light and power circuits from 100 to 600 volts; for A.C. circuits, both bell ringing transformer and 100 to 240 volt A.C. circircuits, Transformer Under-Dome gongs are recommended.

Under-Dome Faraday Gongs will be furnished single stroke when specially ordered at \$1.00 list

additional.

These gongs will be furnished wound to any resistance desired at standard list additions shown elsewhere

Note: The Underwriters' laboratories approve Under-Dome Faraday Gongs models U, UP and UFP for signal systems coming under their supervision.

#### PRICE LIST

#### MODEL U-FOR REGULAR WORK

List No.	Size, Gong	No. of	Resistance	List Price
No.	Inches	Frame	Ohms	Each
U- 8	8	. 3	3	<b>\$26.58</b>
U-10	10	4	5.2	43.04

#### MODEL UP-WITH OUTLET CAST BOX FOR EXPOSED CONDUIT WORK

UP- 8	8	<b>'</b> 3	· <b>3</b>	<b>\$</b> 41.58
UP-10	10	4	5.2	60.90

#### MODEL UFP-WITH PRESSED-STEEL OUTLET BOX FOR CONCEALED CONDUIT WORK

UFP-8	. 8	3	3	\$34,14
UFP-10	10	4	5.2	51 14

Assortment of all sizes of enclosed type gongs and buzzers permitted to make up list value, but Faraday and Competition Skeleton bells cannot be included with Under-Dome gongs or buzzers; list price additions for special resistance windings may be included with bells to make up list value.

Platinum contacts: Add to above prices for pure platinum contacts, \$2 list.

Triplex contacts: Add to above prices for Triplex platinoid contacts, \$4 list. For Triplex pure platinum contacts, add to above prices, \$8 list.

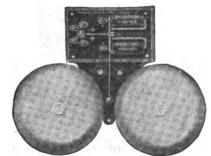
#### TRANSFORMER DOUBLE-GONG FARADAY ENCLOSED-TYPE **BELLS**

National Code Standard VIBRATING-WEATHERPROOF

For Operation on 18 Volt AC Bell Ringing Transformer Circuits, and 100 to 220 Volt AC Light and Power Circuits, 25-60 Cycles



Model "DT" Regular Pattern Model "DTP" For Conduit Work



Mechanism Models "DT" and "DTP"

These bells are designed for five different A. C. service conditions. All five types on this page are designed to be connected direct on line without external resistance of any sort; but there are two distinctly different types of bells, viz.: Multiple-Type and Series-Type.

Multiple-Type Gongs for 100 to 220 volt A. C. circuits should always be connected in multiple, like an incandescent lamp is connected to circuit. Multiple-Type Gongs must never be connected in series.

Series-Type Gongs, while requiring no external resistance, may be connected either in multiple or in series—the latter being particularly advantageous, however, under some conditions when lines are long and size copper small; the Series-Type Gong, in operation, never opens the circuit, minimizing sparking at contacts, etc.; the operation of any one or more gongs in the series may be stopped without interfering with

the working of other gongs in circuit.

Faraday Double-Gong Bells listed on this page are entirely different from any A. C. gongs on the market, because of the new patented quick-break pole-reversing commutator device, which automatically reverses the pull on the armature at extreme position, and keeps pull on the armature till it is up against the core; all other double-gong bells reverse the current when armature is in the middle position, causing the magnets to pull the armature in the opposite direction before the end of the stroke.

PRICE LIST

	MULTIPLE						SERIES																						
List No.	Sine Each Gong Inches	Each Gong	Each Gong	Each Gong	Each Gong	Each Gong	Each Gong	Facil	Each Gong	Facil	Each Gong Z	Each	Facu	Eacu	Eacu	Facu	EMCH	Size Each		Cu   Resistance   Resistance		220 Volts 60 Cycles in Multiple Line External	SERIES-TYPE A. C. 100-110 Volts 25 to 60 Cycles Direct in Series on Line No External Resistance		SERIES-TYPE A. C. 220 Volts 25 to 60 Cycles Direct in Series on Line No External Resistance		SERIES-TYPE A. C. Transformers 18 Volts 25 to 60 Cycles Direct on Terminals No External Resistance		CONDUIT PATTERNS Add "P" to Model No. and add to Lists in Previous Columns
		•	Ohms Re- sistance per Pair Coils	List Price Each	Ohms Re- sistance per Pair Coils	List Price Each	Ohms Re- sistance per Pair Coils	List Price Each	Ohms Re- sistance per Pair Coils	List Price Each	Ohms Re- sistance per Pair Coils	List Price Each	For Model "DTP" Add																
DT- 3 DT- 4 DT- 5 DT- 6 DT- 7 DT- 8 DT-10 DT-12 DT-14 DT-16	3 4 5 6 7 8 10 12 14 16	1 1 1 3 3 4 4 4 4	400 400 400 30 30 30 24 24 24 24	\$17.86 18.76 22.72 27.52 29.78 32.02 45.76 59.26 78.00 99.00	800 800 800 600 600 500 500 500	\$19.36 20.26 24.22 29.92 32.18 34.42 49.42 62.92 81.68 102.68	1000 1000 1000 1000 1000 1000 1000 100	\$19.36 20.26 24.22 30.08 32.32 34.58 49.72 63.22 81.98 102.98	2000 2000 2000 2000 2000 2000 2000 200	\$20.40 21.30 25.28 31.28 33.52 35.78 50.32 63.82 82.58 103.72	30 30 30 30 30 30 30 30 30 30	\$17.64 15.60 19.58 26.18 28.42 30.68 45.00 58.50 77.26 98.26	\$8.10, 8.10 8.10 9.07 9.07 9.07 9.72 9.72 9.72 9.72																
DT-18	18	4		121.50	500	125.18	1000	125.48	2000	126.08	. 30	120.76	9.72																

NOTE: Resistance in ohms shown in "Ohms Resistance" columns is the resistance of both coils combined; the actual resistance in circuit is only 1/2 that shown above, but it will, of course, be understood that each coil is wound to take the entire line-voltage, not the pair as in single-gong bells.

Don't fail to specify which of five types is required, voltage and cycles, in addition to "List No.," otherwise order cannot be filled.

When "Series" type gongs are required, order must state: (a) How many gongs are to be connected in each series. (b) Voltage and cycles of circuit. (c) Length of line (both legs) and size of wire.

Assortment of all sizes of Enclosed-Type Gongs and Buzzers permitted to make up list value, but Far-

aday and Competition Skeleton Bells cannot be included with Enclosed-Type Gongs of Buzzers.

#### DOUBLE-GONG FARADAY ENCLOSED-TYPE BELLS

National Code Standard

VIBRATING-WEATHERPROOF, FOR BATTERY AND D.C. CIRCUITS (Cannot be used on A.C. Circuits)



Model "D" Regular Pattern Model "DP" For Conduit Work



Mechanism Model "D" and "DP"

These bells are designed for five different D.C. service conditions, as shown in headings above price columns below. All five types on this page are designed to be connected direct on line without external

resistance of any sort, but there are two distinctly different types of bells, viz.: Multiple Type and Series Type-Multiple-Type Gongs for 100-125 and 220-250 volts and battery circuits of all voltages should always be connected in multiple, like an incandescent lamp is connected to circuit. Multiple-Type Gongs must never be connected in series

Series-Type Gongs, while requiring no external resistance, may be connected either in multiple or in series—the latter being particularly advantageous, however, under some conditions when lines are long and size copper small; Series-Type Gong, in operation, never opens the circuit, minimizing sparking at contacts, etc.; the operation of any one or more gongs in the series may be stopped without interfering with the working of other gongs in circuit.

Faraday Double-Gong Bells listed on this page are entirely different from any double-gong bells on the market, because of the new patented quick-break pole-reversing commutator device, which automatically reverses the pull on the armature at extreme position, and keeps pull on the armature till it is up against the core; all other double-gong bells reverse the current when armature is in the middle position. causing the magnets to pull the armature in the opposite direction before the end of the stroke.

PRICE LIST

	MULTIPLE								SERIES				
List	Size Each		MULTIPLE-TYPE D. C. 100-125 Volta Direct in Multiple on Line No External Resistance		MULTIPLE-TYPE D. C. 220-250 Volts Direct in Multiple on Line No External Resistance				SERIES-TYPE D. C. 100-125 Volts Direct in Series on Line No External Resistance		SERIES-TYPE D. C. 220-250 Volts Direct in Series on Line No External Resistance		CONDUIT PATTERNS add "P" to Model No. and add to Lists
No.	Gong Inches	No.	Ohms Re- sistance per Pair Coils	List Price Each	Ohms Re- sistance per Pair Coils	List Price Each	Ohms Re- sistance per Pair Coils	List Price Each	Ohms Re- sistance per Pair Coils	List Price Each	Ohms Re- sistance per Pair Coils	List Price Each	Columns  For Model "DP" Add
D- 3	3	1	1000	\$19.36	2000	\$20.40	3	\$14.40	1000	\$19.36	2000	\$20.40	\$8.10
D- 4	4	1	1000	20.26	2000	21.30	3	15.48	1000	20.26	2000	21.30	8.10
D- 5	5	1	1000	24.22	2000	<b>25</b> .28	3	16.88	1000	24.22	2000	<b>25</b> .28	8.10
D- 6	6	3	1000	30.08	2000	31.28	6	19.12	1000	<b>3</b> 0.08	2000	31.28	9.08
D- 7	7	3	1000	32.32	2000	33.52	6	21.38	1000	32.32	2000	33.52	9.08
D- 8	8	3	1000	34.58	<b>2</b> 000	35.78	6	23.62	1000	34.58	2000	35.78	9.08
D-10	10	4	1000	49.72	2000	50.32	10	37.12	1000	49.72	2000	50.32	9.72
D-12	12	4	1000	63.22	2000	63.82	10	50.62	1000	63.22	2000	63.82	9.72
D-14	14	4	1000	81.98	2000	82.58	20	61.88	1000	81.98	2000	82.58	9.72
D-16	16	4	1000	102.98	2000	103.72	20	90.38	1000	102.98	2000	103.72	9.72
D-18	18	4	1000	125.48	2000	126.08	20	112.88	1000	125.48	2000	126.08	9.72

Note: Double-Gong Bells, above described, will be wound to any desired special resistance for use on D. C. circuits. For list prices for such winding, see special listing elsewhere, being careful to note that double-gong bells always have to be wound to maximum resistance per coil, not per pair as single-gong bells; therefore, list prices of double the resistance of single-gong bells must be figured. For example, a single-gong bell to operate without excessive sparking on a given D. C. voltage might be wound to 500 ohms, but a double-gong for same use 500 ohms per coil or 1000 ohms per pair.

Don't fail to specify which of five types is required and voltage in addition to "List No.," otherwise

order cannot be filled.

When Series type gongs are required order must state: (a) How many gongs are to be connected in each series. (b) Voltage of circuit. (c) Length of line (both legs) and size of wire.

Assortment of all sizes of Enclosed Type Gongs and Buzzers permitted to make up list value, but Fara-

day and Competition Skeleton Bells cannot be included with Enclosed Type Gongs or Buzzers.

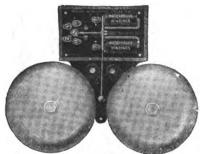
#### LOUD-RINGING MAGNETO EXTENSION FARADAY DOUBLE-GONG BELLS

National Code Standard

VIBRATING ENCLOSED-TYPE, WEATHERPROOF; FOR OPERATION ON A.C. MAGNETO GENERATOR CIRCUITS OF 16 2/3 CYCLES



Regular Pattern Model "M"
Loud-ringing Magneto Extension Bells
Model "MP" for Conduit Work



Mechanism Models "M" and "MP" Loud-ringing Magneto Extension Bells

Mechanisms of Model M Loud-ringing Magneto Extension Bells are of polarized type with permanent magnets—entirely different in principle from the standard double-gong bell. These bells are made in three sizes, viz., 6 inch, 8 inch and 10 inch. They cannot be furnished in larger sizes.

Under certain line conditions, the operation of Model M bells is improved by use of condensers, which are listed in two (2) capacities at foot of page. Price of bells do not include condensers and in all cases where condensers are wanted specific order for same must be given, as M bells are regularly furnished without condensers.

Resistance Size Ohms		Regular P Mode		For Conduit Work————————————————————————————————————		
Gong Inches	Frame No.	per Pair Magnets	Model No.	List Price Each	Model No.	List Price Each
6	3	80	M-680	\$28.28	MP-680	\$35.84
6	3	160	M-6160	28.88	MP-6160	36.44
6	3	300	M-6300	29.78	MP-6300	37.34
6	3	500	M-6500	29.92	MP-6500	37.48
6	3	1000	M-61000	30.08	MP-61000	37.64
6	3	1200	M-61200	30.00	MP-61200	38.84
6	3	1600	M-61600	31.28	MP-61600	38.84
8	3 3 3	80	M-880	32.78	MP-880	40.34
8	3	160	M-8160	33.38	MP-8160	40.94
8	3 3	300	M-8300	<b>34.28</b>	MP-8300	41.84
8	3	<b>500</b>	M-8500	34.42	MP-8500	41.98
8	3	1000	M-81000	34.58	MP-81000	42.14
8 8 8	3	1200	M-81200	35.78	MP-81200	43.34
8	3 3 3 3	1600	M-81600	<b>35.78</b>	MP-81600	43.34
10	3	80	M-1080	46.28	MP-1080	<b>53</b> .84
10	3	160	M-10160	46.88	MP-10160	54.44
10	3	300	M-10300	47.78	MP-10300	<b>5</b> 5.34
10	3	500	M-10500	47.92	MP-10500	<b>5</b> 5.48
10	3	1000	M-101000	48.08	MP-101000	55.64
10	3 3 3	1200	M-101200	50.32	MP-101200	57.88
10	3	1600	M-101600	50.32	MP-101600	57.88

Above prices do not include condensers.

#### **CONDENSERS**

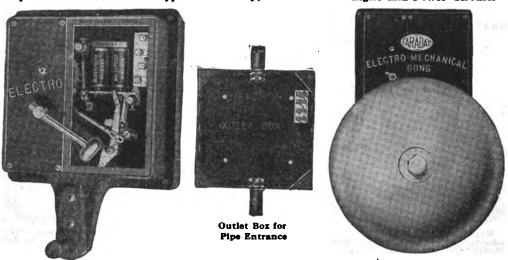
List No.	Capacity	List Price Each
CMF-2	<b>2</b> MF	<b>\$</b> 3.60
CMF-4	<b>4MF</b>	6.84

Assortment of all sizes enclosed-type gongs and buzzers permitted to make up list value, but Faraday and Competition Skeleton Bells cannot be included with enclosed-type gongs or buzzers.

#### **ELECTRO-MECHANICAL FARADAY GONGS**

Nat. Code Standard
VIBRATING AND SINGLE-STROKE

Open and Closed Circuit Types for Battery, D.C. and A.C. Light and Power Circuits



Mechanism, Model B

Model E. Regular Pattern Model EP For Conduit Work

Electro-mechanical gongs should be much more extensively used than they are, for their field of usefulness and desirability in signal gong work is extremely broad.

Electro-mechanical gongs are designed to give a very loud, powerful signal, with a minimum of current—

the minimum in the Faraday make being as low as 60 milli-amperes.

In an electro-mechanical type gong, the blow itself on the gong is struck by a heavy ball on the end of a lever, released by the electric current, but operated by a powerful clock spring.

The powerful steel clock spring operating the main shaft is securely housed on the underside of the mounting plate—entirely separate from the gear and lever compartment. Heavy felt gaskets prevent dust and dampness getting into the mechanism.

Faraday Electro-mechanical Gongs give approximately 700 blows with one winding and at \$10.00 list additional per gong will be furnished, when specially ordered, with reliable "Re-wind Signal" contactor, to which may be connected a "Tell-Tale" Bell to give notification whenever a gong needs rewinding; it will also give warning if, from any cause, the mainspring of the mechanism should break.

For even open work wiring without conduit, Models EP and EFP are strongly recommended, because their design affords the simplest and most convenient method of installation; in these models, the terminals for connections to circuit wires are mounted in the outlet box backs, so that when the mechanism of the

gong is put up the operation is easy and convenient.

Regularly furnished with "knockouts" for ½ inch conduit in four (4) sides of the box; when specially ordered will be furnished without extra charge with additional "knockout" in back; also without extra charge for ¾ inch conduit when specially ordered.

Standard finish: dull black enamel with gunmetal gongs; cases, when specially ordered, will be furnished without additional charge in English vermilion finish.

The following types of mechanism are made and orders cannot be filled unless type is specified:

(1) Single-stroke, for open-circuit work.
(2) Single-stroke, for closed-circuit work.

(3) Continuous-ringing, for open-circuit work. (4) Continuous-ringing, for closed-circuit work.

(5) To ring continuously until run down, for open-circuit work.
 (\$10.00 list additional.)
 (6) To ring continuously until run down, for closed-circuit work.
 (\$10.00 list additional.)

These gongs will be furnished wound to any special resistance desired at standard list additions for No. 3 frame. Model No. EFP

				Mod	el EP	With Conduit Box Back			
			odel E		it Box Backs	and Wall F	Scutcheon		
		For Regula	r Installations	For Expose	ed (Surface)	For Flush (Concealed			
			t Conduit	Con	duit	Conduit)			
Size	Regular		List		List		List		
Gong	Resistance	Model	Price	Model	Price	Model	Price		
Inches	Ohms	No.	Each	No.	Each	No.	Each		
6	20	E- 6	\$59.70	EP- 6	<b>\$74</b> .70	EFP- 6	\$82.20		
8	20	E- 8	78.00	EP- 8	93.00	EFP- 8	100.50		
20	20	E-10	87.60	EP-10	102.60	EFP-10	110.10		
12	20	E-12	94.00	EP-12	109.00	EFP-12	116.50		
14	20	E-14	110.00	EP-14	125.00	EFP-14	132.50		
15	20	E-15	146.40	EP-15	161.40	EFP-15	168.90		
16	20	E-16	154.80	EP-16	169.80	EFP-16	177.30		
18	20	E-18	166.50	EP-18	181.50	EFP-18	189.00		

Assortment of all sizes electro-mechanical, enclosed type gongs and buzzers permitted to make up list values, but Faraday and Competition Skeleton Bells cannot be included with electro-mechanical, enclosed type gongs or buzzers; list price additions for special resistance windings may be included with bells to make up list value.

#### A C TRANSFORMER SINGLE-GONG

#### Faraday Enclosed Type Bells

(National Code Standard)

VIBRATING-WEATHERPROOF-FOR OPERATION ON 18 VOLT A.C. BELL-RINGING TRANSFORMER-CIRCUITS AND 100 TO 220 VOLT A.C. LIGHT AND POWER CIRCUITS, 25-60 CYCLES



Model "AT" Regular Pattern Model "ATP" for Conduit Work



Model "BT" Regular Pattern Model "BTP" for Conduit Work



Model "CT" Regular Pattern Model "CTP" for Conduit Work

The mechanism of these Transformer Faraday Gongs is entirely different in design and operation from the ordinary type of signal gong; Transformer Faraday Gongs having no contacts can be operated in series or in multiple, with absolutely no sparking, and may be safely installed in places where presence of gas, inflammable vapors and dust have hitherto made the use of electric signalling apparatus dangerous, if not actually impossible.

The extreme rapidity of vibration gives a sound just as satisfactory for code signalling as a single stroke gong.

Transformer Faraday Gongs are regularly furnished, as listed below, to operate direct in multiple without external resistance on 18 volt, 110 volt and 220 volt circuits; when specially ordered they will be furnished to operate as follows, viz.:

(a) In series (any number as may be specified not exceeding 10 gongs) on 100-110 volts A.C. light and power circuits 25-60 cycles.

cycles.

(b) In series (any number as may be specified not exceeding 20 gongs) on 220 volts A.C. light and power circuits 25-60 cycles

Prices for series gongs same as given below for 18 volt transformer circuits.

Even when as many as 20 Tansformer Faraday Gongs are connected in series on a 220 volt circuit or 10 on 110 volt circuit, the current consumption of all gongs is no greater than that required by one gong—an important desideratum in satisfactory operation and life of circuit closing devices.

Magnet cores are of latest type laminated construction, windings are of enameled wire and every detail of the mechanism

is of the same standard as light and power circuit apparatus.

When used on bell ringing transformers, it is very important that the transformer be of sufficient capacity, or satisfactory gong operation is impossible; ample size copper in line between transformers and gongs is also an absolute essential.

Model No. Don't Fail to Specify Model No. and Voltage at Which to Operate	Size Gongs Inches All Gongs Full- Polished Nickel Unless Otherwise Specified	Frame No. Size of Mechanism	To Operate on A.C. 18 Volt Transformer Circuits in Multiple List Price Each	To Operate on 100-110 Volt A.C. Circuits in Multiple No External Resistance Required List Price Each	To Operate on 220-250 Volt A.C. Circuits in Multiple No External Resistance Required List Price Each	Conduit Patterns Add "P" to Model No. and Add to Lists in Previous Columns For Model "ATP" Add
AT- 31/2	31/2	l i	\$14.92	\$16.28	\$22.48	\$8.10
AT 4 AT 5	5	1	15 19	16.80	23.26 33.00	8.10
AT - 6	6	2	19.54 21.64	25.66 27.38	33.00 34.88	8.42 - 8.42
AT 7	7	2	24.56	30.38	37.84	9.32
AT- 8	8	3	26.58	82.26	39.76	9.32
AT- 9	ğ	ă.	35.56	41.92	50.18	9.72
AT-10	10	Ĭ.	42.28	48.76	57.00	9.72
AT-12	12	X-5	55.29	63.16	72.00	9.72
	"BT" MODEL	HALF GRID-G	GUARDED GONG	S-31/4 INCHES T	O 12 INCHES	For Model "BTP" Add
BT- 314	31/2	1	\$16.72	\$17.78	\$23.98	\$8.10
BT- 4	4	1	16.99	18.30	24.76	8.10
BT- 5	5	2	<b>21.80</b>	27.90	<b>35</b> .26	8.42
BT- 6	6	2	23.88	29.62	37.12	8.42
BT- 7	· 7	3	28.30	34.32	41.62	9.32
BT- 8 BT- 9	8 9	3	30.34	36.08	43.70 54.68	9.32
BT-10	10	7	40, 06 46, 78	46 42 53 26	61.50	9.72 9.72
BT-12	12	X-5	61.78	69.16	78.00	9.72
J	••	A-0	01.70	08.10	10.00	For Model
	"CT" MODE	L—FULL GRID-	GUARDED GON	GS—5 INCHES TO	12 INCHES	"CTP" Add
CT- 5	5	2	\$33.04	\$39.16	\$46.50	\$8.42
CT- 6	ő	ž	35.14	40.88	48.38	8.42
CT- 7	7	3	44.80	50.62	58.12	9.32
CT- 8	8	3	46.84	52.58	60.00	9.32
CT- 9	.9	· 4	65.56	71.92	80.18	9.72
CT-10	10	-4	72.28	78.76	87.00	9.72
CT-12	12	X-5	94.78	102.16	111.00	9.72
Don't feil	to anacify voltage o	ange era ta anareta	on in addition to M	Indal No · otherwise o	edame cannot be fille	vd.

Don't fail to specify voltage gongs are to operate on in addition to Model No.; otherwise orders cannot be filled.

Assortment of all sizes enclosed type gongs and buzzers permitted to make up list value, but Faraday and Competition Skeleton bells cannot be included with enclosed type gongs or buzzers; list price additions for special resistance windings may be included with bells to make up list value.

#### TRANSFORMER UNDERDOME Faraday Enclosed Type Gongs

#### National Code Standard VIBRATING-WEATHERPROOF

For Operation on 18 Volt A.C. Bell-ringing Transformer Circuits and 100 to 220 Volt A.C. Light and Power Circuits-25-60 Cycles



Model "UT" For Regular Work



Mechanism of Non-Sparking Underdome Gongs Models "UT," "UTP" and "UTFP"



Model "UTP" Model "UTP"
For Exposed Conduit Work
Model "UTFP"
For Flush (Concealed) Conduit Work

The mechanism of these Transformer Faraday Gongs is entirely different in design and operation from the ordinary type of signal gong; Transformer Faraday Gongs having no contacts, can be operated in series or multiple, with absolutely no sparking, and may be safely installed in places where presence of gas, inflammable vapors and dust have hitherto made the use of electric signalling apparatus dangerous, if not actually impossible.

The extreme rapidity of vibration gives a sound just as satisfactory for code-signalling as a single stroke

gong.

Transformer Faraday Gongs are regularly furnished, as listed below, to operate direct in multiple without external resistance on 18 volt, 110 volt and 220 volt circuits; when specially ordered, they will be furnished to operate as follows, viz:

(a) In series (any number as may be specified not exceeding 10 gongs) on 100-110 volt A.C. light and power circuits 25-60 cycles.

(b) In series (any number as may be specified not exceeding 20 gongs) on 220 volts A.C. light and power circuits 25-60 cycles.

Even when as many as 20 Transformer Faraday Gongs are connected in series on a 220 volt circuit or 10 on 110 volt circuit, the current consumption of all gongs is no greater than that required by one gong, an important desideratum in satisfactory operation and life of circuit-closing devices.

Magnet cores are of latest type laminated construction, windings are of enameled wire and every detail of the mechanism is of the same standard as light and power circuit apparatus. —For Flush (Concealed)-

		For Reg	ular Work	For Expose	ed Conduit-	' Conduit We	ork
	*	Mode	l "UT"	Work Mod	el "UTP"	Model "UTF	P"
Size Go	ng Frame	List	List Price	List	List Price	List	List Price
Inche		No.	Each	No.	Each	No.	Each
FOR	USE DIRE	CT IN MUL	TIPLE ON 18	VOLT 25-60 (	CYCLE A.C. BE	LL-RINGING	TRANS-
			FOR	MER CIRCUIT	`S		
8	3	UT-8	<b>\$36</b> .08	UTP-8	<b>\$4</b> 9.58	UTFP-8	<b>\$</b> 43.64
10	4	UT-10	51.22	UTP-10	66.22	UTFP-10	58.72
FOR 1	USE DIRE	CT IN MUL	TIPLE ON 10	0-110 VOLT 25	-60 CYCLE A.C	C. LIGHT AND	POWER
				CIRCUITS			
8	3	UT-8	<b>\$</b> 34.58	UTP-8	<b>\$48.08</b>	UTFP-8	\$42.14
10	4	UT-10	49.72	UTP-10	64.72	UTFP-10	57.22
FOR 1	USE DIRE	CT IN MUL	TIPLE ON 200	0-220 VOLT 25	-60 CYCLE A.C	. LIGHT AND	POWER
			(	CIRCUITS			
8	3	UT-8	<b>\$</b> 35.78	UTP-8	<b>\$49.28</b>	UTFP-8	<b>\$</b> 43.34
10	4	UT-10	49.72	UTP-10	65.92	UTFP-10	57.82
FOR 1	USE IN SE	ERIES (ANY	NUMBER AS	MAY BE SPE	CIFIED NOT E	<b>XCEEDING 10</b>	GONGS)
	ON	100-110 VOL	T 25-60 CYCI	E A.C. LIGH	T AND POWER	CIRCUITS	•
*8	3	UT-8	<b>\$36</b> .08	UTP-8	<b>\$</b> 49.58	UTFP-8	<b>\$43.64</b>
*10	4	UT-10	51.22	UTP-10	66.22	UTFP-10	58.72
FOR 1	use in Se	ERIES (ANY	<b>NUMBER AS</b>	MAY BE SPE	CIFIED NOT E	XCEEDING 20	GONGS)
					T AND POWER		
*8	3	UT-8	<b>\$36</b> .08	UTP-8	<b>\$49.58</b>	UTFP-8	<b>\$43</b> .64
*10	4	UT-10			66.22		
T	ransformers	must always l	be of sufficient c	apacity or satisfa	actory gong opera	tion is impossibl	e. Ample
				nd gongs is also		•	-

\*When series gongs are ordered, the number to be connected in series together with voltage and cycles of circuit must be given or order cannot be filled.

Assortment of all sizes enclosed type gongs and buzzers permitted to make up list value, but Faraday and Competition Skeleton Bells cannot be included with enclosed type gongs or buzzers. Electrical House Goods and Novelties 120-2

#### **BELL RINGING TRANSFORMERS**



No. 1 Transformer



Carton for 12 No. 1 Transformers Standard Package

#### Western Electric

No. 1 Bell Ringing Transformer

The function of the bell ringing transformer is the operation of bells, door openers, buzzers, annunciators, or, in fact, any means of signalling that is used in the average residence as well as for factory and general

signalling purposes.

The Western Electric No. 1 Transformer is a small inexpensive device, having three different voltages on the secondary side of 6, 8 and 14 volts, this range is provided to meet the varying conditions of operation. The external dimensions are: width, 2¾ inches; height, 1¾ inches; length, 3¾ inches. It is encased in a sheet metal container. This transformer is of the shell type construction, and it is so designed as to give absolute maximum bell ringing power allowed by the fire underwriters, as such bell ringing power is expressed in watts capacity. Particular attention has been paid to the insulation factors and to that end insulaton material is so disposed as to protect the primary and secondary from each other as well as from the primary and secondary and iron. Electrical bell transformers are always floating on the service or lighting line. It is therefore essential that their no-load losses—core losses—be as low as possible, at least small enough not to operate the ordinary house watt meter.

	· • · · · · · · · · · · · · · · · · · ·					
List						List Price
No.		Width	Height	Length	Weight	Each
1	Western Electric Transformer	$2\frac{3}{4}$ ins.	13/4 ins.	33 ins.	2 lbs.	<b>\$</b> 3.00



Medium 60 Watts Capacity



Large 125 Watts Capacity

Bell Ringing Transformers

Wayne bell ringing transformers are built in capacities suitable to answer every bell ringing requirement ranging from 5 to 125 watts capacity inclusive.

	25 to 49 Cycles									
						•		Capacity in Std. Makes	Shp.	List
List		-Voltage-	<u> </u>		Length	Width	Depth	of Trans. Bells	Wgt.	Price
No.	Primary	Secondary	Watts	Frequency	Inches	Inches	Inches	Simultaneously	Lbs.	Each
192340	110	12	5	25 to 49	$6\frac{1}{2}$	$3\frac{1}{2}$	$2\frac{1}{2}$	3-3'' ·	$5\frac{1}{2}$	<b>\$</b> 4.50
179543	110	5, 10, 15	60	25 to 49	$5\frac{3}{4}$	6	$3\sqrt[3]{4}$	15-4", 5- 5", 4-7", 3-10"	10	16.50
179544	110	8, 16, 24	125	25 to 49	$6\frac{1}{2}$	7	41/2	30-4", 16-5", 8-7", 6-10"	15	21.00
		, ,				40 Cvcl	e8	, , ,		
179541	110	12	5	50 to 140	23/8	23/8	21/4	3-3′′	2	<b>\$</b> 4.00
191395	110	8, 16, 24	60	50 to 140	$6\frac{1}{2}$	31/2	$3\frac{1}{4}$	15-2", 5-5", 4-7"	8	13.50
99192	110	10, 20, 30	125	50 to 140	$5\frac{3}{4}$	6	$3\frac{3}{4}$	30-3", 10-5", 8-7", 6-10"	10	18.50
179542	220	12	5	50 to 140	$2\frac{1}{2}$	23/8	$2\frac{1}{4}$	3-3"	$2\frac{1}{2}$	4.50
191771	220	8, 16, 24	60	50 to 140	$6\frac{1}{2}$	$3\frac{1}{2}$	$3\frac{1}{4}$	15-2", 5-5", 4-7"	8 -	14.50
191772	220	10, 20, 30	125	50 to 140	$5^{3}\sqrt{4}$	6	$3\frac{1}{4}$	15-2", 5-5", 4-7" 30-3", 10-5", 8-7", 6-10"	10	19.50
						24-2	, -	Electrical House Goods	and N	ovelties

#### BELL RINGING, TOY AND SIGN LIGHTING TRANSFORMERS







**Danditoy Transformer** 



No. 2D Toy Transformer

#### **Bell Ringing Transformers**

#### For Alternating Current Only-Standard 110 Volts, 60 Cycles

Types C, D, SS and 3S are for extra heavy duty such as the operation of large size bells or a large installation of bells to be rung at once.

List	Voltage	Cap.	Di	imensions, Inch	es	. Wt.	List Price
No.	Secondary	Watts	Length	Width	Height	Lbs.	Fach
Type C	6	60	6	41/8	43/8	$7\frac{1}{2}$	\$8.00
Type D	6-14-20	60	6	41/8	43/8	$7\frac{1}{2}$	9.30
Type SS	6-12-18-24	100	6	41/8	43/8	9	12.00
Type 3S	10-25-35	100	6	41/8	43/8	9	13.34

#### New Type Thordarson Toy Transformer

The Danditoy is of the same construction and material as the higher priced transformers, the only difference being size. It is equipped with a voltage regulator giving eleven different voltages in steps of  $2\frac{1}{2}$  volts, starting at  $2\frac{1}{2}$  and going up to  $27\frac{1}{2}$  volts. This device will run all electrical toys excepting the heavier higher priced train outfits, for which we recommend the larger sizes.

Danditoy 2½-27½ 40 3¾ 3 3 \$4.40

#### Standard Type Toy Transformer

Thordarson toy transformers eliminate the use of batteries. They are designed to operate all classes of electrical toys, such as miniature trains, small signs, motors, light small lamps, operate Ruhmkorff and other types of induction coils. The 1D has secondary voltages ranging from 1 to 20 volts in steps of one volt each. The 2D has a range from 1 to 25 volts in steps of one volt each; and the No. 5B and 5D a range of from 1 to 15 volts in steps of one volt each. Several different voltages can be used simultaneously.

The 5B is equipped with both circuit breaker and voltage regulator. The D's are equipped with voltage

regulator only.

It is unnecessary to use a rheostat with any of the above transformers.

List			I	Dimensions, Inch	es	Wt.,	List Price
No.	Voltage	Watts	Length	Width	Height	Lbs.	Each
1D	1-20	80	5	4	33/4	8	\$8.26
2D	1-25	140	51/4	5	4	11	11.26

#### Sign Lighting Transformers



Sign Lighting Transformer

The multiple lighting transformers are designed to be used in connection with low voltage Mazda lamps, either for sign or residence lighting. These transformers embody all essentials of a perfect design, electrical, magnetic and mechanical. They are double wound and insulated to withstand a breakdown of 2500 volts between the primary, secondary and core. Standard transformers can be furnished for two and three wire systems, 110 and 220 volt primaries, 11 and 22 volt secondaries.

List							*List Price
No.	Watts	Length	Width	Height	Efficiency	Weight	Each
361224	100	$4\frac{7}{8}$ ins.	35/8 ins.	$3\frac{1}{4}$ ins.	91.2%	6 lbs.	\$12.00
361225	150	5 ins.	4 ins.	$3\frac{1}{2}$ ins.	92 %	8 lbs.	16.00
361226	250	$5\frac{3}{4}$ ins.	$4\frac{7}{8}$ ins.	4 ins.	93 %	13 lbs.	21.34
361227	500	$6\frac{5}{8}$ ins.	5 ins.	$4\frac{5}{8}$ ins.	94.2%	19 lbs.	24.00
361228	750	$6\frac{7}{8}$ ins.	5¼ ins.	$4\frac{3}{4}$ ins.	94.9%	25 lbs.	<b>26.66</b>
361229	1000	$7\frac{5}{8}$ ins.	$5\frac{3}{8}$ ins.	5 ins.	95.2%	28 lbs.	<b>2</b> 9.3 <b>4</b>
361230	1500	7¾ ins.	$5\frac{5}{8}$ ins.	$5\frac{1}{4}$ ins.	95.9%	35 lbs.	37.34
<b>3</b> 6 <b>123</b> 1	2000	85% ins.	6 ins.	6 ins.	96.1%	46 lbs.	<b>4</b> 6.66
361232	2500	9 ins.	$6\frac{3}{4}$ ins.	6¾ ins.	96.5%	55 lbs.	53. <b>34</b>
Appr	roved by t	he National	Board of	Fire Underv	vriters.	ode	

Delivery F. O. B. Factory, Chicago, Ill. For warehouse deliveries write nearest house.

#### DRY BATTERY LANTERNS



Western Electric No. 1-Two-cell Lantern



Western Electric No. 7-Single Cell Lantern

#### Western Electric

#### Dry Battery Lanterns

The Western Electric Dry Battery Lantern is furnished in three styles. A two-cell lantern and two types of single cell lanterns.

Western Electric No. 1 Two-cell Lantern. Case is of heavy rolled steel, with ribbed sides to give added strength. The bail is large enough so that the lantern can be carried on the arm over the overcoat with ease. A grip handle is furnished which can be folded flush with the case.

Base. The base is flanged in the same manner as an oil lantern to insure stability.

Reflector. The reflector is of sheet steel drawn to proper shape. It is triple silver plated and polished to a very high luster. The design is such as to produce two distinct cones of light, illuminating a broad circle near the lamp at the same time throwing a strong beam of light several hundred feet. The reflector itself does not form a part of the lantern, but fits into a recess which is drawn from the steel body of the lantern itself.

Switch. The switch is located in a convenient place on the back of the lantern. It consists of a side wiping contact, properly encased to protect it from the weather.

Connector. The connectors are of heavy flexible cords, the ends of which are provided with terminals soldered to the stranded connector. The short connector is for connecting the two batteries in series. The two long terminals connect to the switch and lamp.

Finish. They are finished with a high grade semi-gloss enamel thoroughly baked and some of the metal parts are trimmed in polished nickel plate.

Western Electric No. 7 Single Cell Lantern. The case is of heavy sheet steel. It is provided with a bail and also with a handle made to fit the hand which is firmly riveted to the body of the case.

Reflector. The reflector is made of steel the same as the No. 1 reflector. It is similar in design to that of the No. 1. That is, two cones of light are reflected. One is a large cone near the lantern, but the stronger is in the form of a beam which enables one to detect objects at distances varying from 200 to 300 feet.

Switch. The switch is of the knife blade type mounted on sheet fiber which is rigidly riveted to the top to prevent warping. The whole switch mechanism is exposed and entirely fool-proof.

Finish. The No. 7 lantern is finished with the same enamel as used on the No. 1 lantern.

Western Electric No. 6 Single Cell Lantern. In general appearance and design the No. 6 is similar to the No. 7; the only difference is in the method of holding the glass in the reflector.

#### **GENERAL**

These lanterns are particularly recommended for use in the home, both city and country, as well as to campers, autoists, boatmen, fishermen and other sportsmen, also farmers, nightwatchmen, meter readers and others where a light of this nature is required.

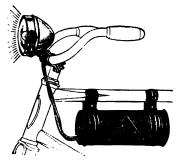
Packing. Each lantern will be packed in a separate carton and twelve cartons of the same item will comprise a standard package.

List				Retail Price l	List Price
No.	Description	Carton	Std. Pkg.	Each	Each
1	Two-cell Western Electric dry battery lantern	1	12	<b>\$</b> 2.25	<b>\$</b> 3.70
460	Bulb for use in two-cell battery lantern			. 13	. 20
7	Single cell Western Electric dry battery lantern	1	12	1.25	2.20
6	Single cell Western Electric dry battery lantern		12	1.25	2.00
41	Bulb for use in the No. 6 and No. 7 lanterns			.13	.20
		Digiti	•od by ■	MICH	

Delivery F. O. B. Marion, Ind. For warehouse deliveries write nearest house.

#### BICYCLE AND VEHICLE LAMPS

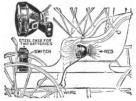
#### DRY BATTERY LAMPS







No. 28A Bicycle Lamp



No. 32 Vehicle Lamp

#### Western Electric

#### Bicycle and Vehicle Lamps

Bicycle Lamps. The line consists of three styles, No. 24A two-cell, 28A two-cell and No. 27 one-cell lighting outfit.

Western Electric No. 24A Lamp. Is a two-cell outfit with the case of the headlight nickel plated.

Case. This outfit consists of a round battery case long enough to take two standard  $2\frac{1}{2}$  x 6 dry batteries. It is made of heavy gauge steel with strap ends felt lined and bent so they can be clamped around the crossbar. In one is a switch arranged so that it can be easily reached by the rider.

**Headlight.** The headlight is bullet shaped and is highly polished nickel plated.

Reflector. The reflector is of drawn steel, triple silver plated and highly polished.

Western Electric No. 28 Lamp. Is exactly the same as the No. 24A except that the headlight is of black japan instead of nickel plated.

Western Electric No. 27 Lamp. Is exactly the same as the No. 28A except the battery case is designed for one battery instead of two.

List				Retail Price	List Price
No.	Description	Carton	Std. Pkg.	Each	Each
24A	Two-cell Western Electric bicycle lamp	1	12	<b>\$</b> 2. <b>50</b>	\$4.30
28A	Two-cell Western Electric bicycle lamp	1	12	2.00	3.50
460	Bulb for use with Nos. 24A and 28A lamps			.13	.20
27	One-cell Western Electric bicycle lamp	1	12	1.75	3.00
444	Bulb for use with No. 27 lamp			.13 `	.20

### Western Electric VEHICLE LAMP NO. 32

This lamp is especially designed for buggy and truck wagon lighting, and is also adapted for lighting motorcycle side cars. The headlight consists of a bullet-shaped casing of drawn steel, finished in black enamel. The reflector is the same style as the bicycle lighting outfit and in the back is a red molded glass jewel.

List			Re	etail Price	List Price
No.	Description	Carton	Std. Pkg.	Each	Each
32	Western Electric vehicle lamp	1	12	<b>\$</b> 2.70	\$4.50
648	Bulb for use with No. 32 lamp			_ Ţ. 13	.20

Delivery F. O. B. Factory Marion, Ind. For warehouse deliveries write nearest house.

#### EVEREADY TUBULAR FLASHLIGHTS

Tubular Flashlights are used extensively by inspectors and others whose work takes them into dark places where a strong steady illumination is needed. The switch for turning the light on and off is operated by the same hand that carries the flashlight.

These flashlights are equipped with two types of switches, the slide switch and the spring switch.

The slide switch is controlled by a pressure of the thumb in either direction. To turn on the light the slide is gently pressed forward; to extinguish the light the slide is pressed backward to its original position. The spring switch is located at the lower end of the flashlight. The light can be flashed on or off quickly by pressing the metal tongue against the cap.

These lights are extremely compact, the entire case being but a little larger than the battery it contains.



Vulcanized Fibre Case No. 2612

#### Tubular Tungsten Flashlights

Vulcanized Fiber Cases, with Permanent Contact List Mfrs. List W. E. List List Mfrs. List W. E. List No. Each Each Each Each 2602 1193 Renewal lamp..... \$0.26  $1\frac{1}{4} \times 5$  in., complete..... \$1.00 \$2.00 \$0.13 791 Renewal battery..... 2614 1½ x 11 in., complete..... 3.50 . 30 . 60 1.75 1197 Renewal lamp..... . 26 711 .45 90 . 13 Renewal battery..... 2604 1½ x 6½ in., complete..... 2.40 Renewal lamp..... .13 1.20 1199 . 30 2.20 4.40 **790** Renewal battery..... . 60 2615  $1\frac{1}{2}$  x 13 in., complete..... Renewal battery..... Renewal lamp..... 26 1198 715 .70 1.40 . 13  $1\frac{1}{2} \times 8\frac{1}{2}$  in., complete.... 2612 2.80 . 26 1.40 1195 Renewal lamp..... .13 705 Renewal battery..... .80 .14 Leatherette Cases, with Permanent Contact 2606  $1\frac{1}{2} \times 8$  in., complete..... \$1.20 \$2.40 2608 1½ x 11 in., complete..... \$1.50 \$3.00 711 705 Renewal battery..... .40 . 80 .45 . 90 Renewal battery..... 1193 Renewal lamp..... .26 .26 . 13 1199 Renewal lamp.....



Miner's Flashlight (Fibre Case) No. 2619

#### Miner's Tungsten Flashlights Vulcanized Fibre Cases, with Permanent Contact

List	N	Ifrs. List V	W. E. List	List	Mf	rs.List V	V. E. List
No.	Size	Each	Each	No.	Size	Each	Éach
2616	1½ x 6 in., complete	<b>\$</b> 1.50	\$3.00	2621	$1\frac{1}{2} \times 11$ in., complete	\$2.25	<b>\$4.50</b>
790	Renewal battery	.30	.60	711	Renewal battery	.45	.90
1198	Renewal lamp	. 13	.26	1199	Renewal lamp	. 13	. <b>26</b>
<b>2</b> 619	1½ x 8½ in., complete	1.70			$1\frac{1}{2} \times 13$ in., complete		5.40
705	Renewal battery	. 40	.80	715	Renewal battery	.70	1.40
1193	Renewal lamp	. 13	.26	1195	Renewal lamp	. 13	. 26
1	All of these flashlights have ne	w impro	ved perm	anent c	contact catch.		



Cloth Covered No. 2624

#### Tubular Tungsten Flashlights

List	Flash and Permanent Contact	Mfrs. List	W. E. List
No.	Size	Each	Each
2625	1½ x 6½ in. alligator cloth covered case, complete	\$0.95	\$1.90
2624	1½ x 6½ in. black cloth covered case, complete	95	1.90
790	Renewal Tungsten battery for either of the above	30	. 60
1198	Renewal Mazda lamp for either of the above	13	
2626	1½ x 8½ in. black cloth covered case, complete	1.00	2.00
2627	1½ x 8½ in. black enameled metal case, complete	90	
705	Renewal Tungsten battery for the 8½ in, lights	40	.80
1193	Renewal Mazda lamp for the 81/2 in. lights	13	.26
2628	Size 11/2 x 61/2 enameled metal	75	1.50
790	Renewal Tungsten battery	30	. 60
1198	Renewal Masda bulb	009.13	
	Bigkized by		

#### EVEREADY POCKET FLASHLIGHTS VEST POCKET TYPE







No. 6961



No. 6962

#### Nickel Plated Tungsten Flashlights

Flash and Permanent Contact

The tungsten battery has made it possible to produce practical flashlights that are actually vest pocket size. The smallest, known as the "Midget," is so tiny that it can be carried in a lady's purse. Equipped with Eveready Tungsten Batteries and Eveready Mazda Lamps they give a surprisingly powerful white light, and the battery, with average use, will usually last from two to four months.

Cases sturdily made and beautifully finished in polished nickel. Sliding contact and button for flash

Mfrs. List W. E. List or continuous light. List No. Each Each \$0.75 6900 \$1.50 .30 700 .60 1179 Renewal Mazda lamp for case No. 6900P..... . 13 .26 Renewal Mazda lamp for case No. 6960F

Renewal Tungsten battery for case No. 6961P

Renewal Mazda lamp for case No. 6961P

2½ x 2 x ¾ in., complete, N.P. finish. .751.50 6961 750 .30 .60 26 . 13 1180 1.00 2.00 6962 .70 Renewal Tungsten battery No. 6962P . . .35 751 Renewal Mazda lamp for case No. 6962P..... 1181 .26





No. 6971



Nickel Plated Tungsten Flashlights The hinged bottom cover has been eliminated and the battery on this type flashlight is inserted from the top of the flashlight case. The contact is made automatically by a mere pressure of the slide. The flanged

top cap which contains the socket and lamp fits snugly into the case and permits renewal of the bulb without the slightest trouble. Mfrs. List List No. Size Each Each 6970 Vest pocket type, complete......  $2\frac{1}{2} \times 1\frac{1}{4} \times \frac{11}{11}$  in. \$0.85 **\$**1.70 700 Renewal Tungsten battery..... .30 60 Renewal Mazda bulb..... 1179 28 . 13 6971 214 x 13/8 x 3/4 in. . 85 750 30 Renewal Mazda bulb..... 1180 est pocket type, complete..... 6972 21 x 2 x 1/2 in. 1.10 2.20 751 Renewal Tungsten battery..... Digitized by GOOS Renewal Mazda bulb.....

Blectrical House Condo and Novelties

#### **EVEREADY POCKET FLASHLIGHTS**







Vest and Coat Pocket Tungsten Flashlights

These flashlights throw a powerful light for a considerable distance. The light is instantly available and absolutely safe. They can be used around the automobile and gasoline tank where a match would be dangerous and might cause an explosion.

The vest and coat pocket flashlights are equipped with a slide switch similar to that used on the tubular flashlights—one hand holds the flashlight and operates the slide. When required, the flashlight may be laid down, leaving both hands free.

	COAT POCKET TUNGSTEN FLASHLIGHT	Mfrs. List	W. E. List
List No.		Each	Each
6901	1 x 2¾ x 3½ in. alligator cloth covered case, complete	\$1.00	\$2.60
6909	1 x 2¾ x 3½ in. vulcanized fiber case, complete	1.50	3.00
6903	1 x 2¾ x 3½ in. black cloth covered case, complete	1.00	2.00
703	Renewal Tungsten battery	.35	.70
1190	Renewal Mazda bulb for above	. 13	.26
1991	11/2 x 21/4 x 5 in. black cloth covered case, complete	1.25	2.50
1992	$1\frac{1}{6} \times 2\frac{1}{6} \times 5$ in. snake cloth covered, complete	1.25	2.50
1993	11/2 x 21/4 x 5 in alligator cloth covered, complete	1.25	2.50
793	Renewal Tungsten battery for above	.35	.70
197	Renewal Mazda bulb, 3.8 volts, for above	. 13	.26
	VEST POCKET TUNGSTEN FLASHLIGHT		
6902	1 x 1% x 3% in. black cloth covered case, complete	\$1.00	\$2.00
6950	1 x 1½ x 3½ in. white celluloid covered case, complete	1.25	2.50
6952	1 x 1 1/2 x 3 1/2 in. snake cloth covered case, complete	1.00	2.00
6954	1 $\times 1\frac{7}{8} \times 3\frac{1}{2}$ in. nickel plated case, complete	1.00	2.00
792	Renewal Tungsten battery for above	.30	.60
1197	Renewal Mazda bulb, 2.7 volts for above (excepting 695-A)	. 13	.26
1182	Renewal Mazda bulb, 2.7 volts, for case No. 6954 only	. 13	.26





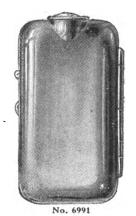
Tungsten Cap and Lapel Lights

The cap light is composed of a reflector, battery case (containing the battery) and connecting cord. The battery may be carried in the pocket or laid in any convenient place. The reflector can be fastened to the cap or elsewhere by means of the attachment pins. For underground inspection, general surveying and camp life the Eveready cap light becomes indispensable.

The lapel light is designed on the same principle as the cap light and is specially adapted for use by orchestras, bands, etc. It can be adjusted to the coat lapel, the cap or any other convenient place.

List	Mfrs. W. E. List	-11	List		Mirs.	W. E. List
No.			No.		List Each	Each
2876	Cap lantern (5 cell, complete) \$5.50 \$11.00	Н	1199	Renewal Mazda bulb, 4 volts.	<b>\$</b> 0.13	\$0.26
<b>7</b> 31	Renewal tungsten battery	IJ	3703 -	Lapel light (complete)	2.00	4.00
1195	Renewal Mazda bulb, 6.2	-	752	Renewal tungsten battery	.45	.90
	volts		1199	Renewal Mazda bulb, 4 volts.	. 13	.26
2877	Cap lantern (3 cell, complete) 5.00 10.00	I		Casa	.1.	
734	Renewal tungsten battery. 90			Digitized by GOOG	216	

#### **EVEREADY POCKET FLASHLIGHTS**







No. 6992

Nickel Plated Tungsten Flashlights

This type flashlight opens exactly like a cigarette case. The beauty of design as well as convenience and ease of replacing the battery and lamp are plainly shown in the cut above.

Notice the thin and neat appearance and the rounded corners without projections to wear the pocket. List No. Mfrs. List Each W.E. List Each Size % x 1½ x 2½ inches (complete).

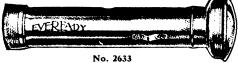
Renewal Tungsten battery. 6990 \$1.00 700 . 60 .30Renewal Mazda bulb, 2.5 volts
Size ¾ x 1½ x 3¼ inches (complete)
Renewal Tungsten battery 1179 . 13 . 26 6991 1.00 2.00 750 . 60 .30 Renewal Mazda bulb, 2.5 volts.
Size 3/4 x 23/4 x 31/4 inches (complete).
Renewal Tungsten battery.
Renewal Mazda bulb, 3.8 volts. 1180 26 .13 6992 2.50 1.25 751 .35 .70 1181 .26





No. 2632





Nickel Plated Tubular Tungsten Flashlights

The cases are made entirely of brass, heavily nickel plated, which especially adapts them for use around motor cars, motor boats, or wherever the hands of the user are likely to be oily or wet.



List		Mfrs. List	W. E. List
No.		Each	Each
2630	Size 11/4 x 5 (complete)	<b>\$</b> 1.25	\$2.50
791	Renewal Tungsten battery	.30	. 60
1182	Renewal Mazda bulb, 2.7 volts	. 13	. 26
2631	Size 1½ x 6½ (complete)	1.50	3.00
790	Renewal Tungsten battery	.30	.60
1198	Renewal Mazda bulb, 2.9 volts	. 13	. 26
2632	Size 1½ x 8½ (complete)	1.75	3.50
2633	Large lens and reflector (complete)	2.40	4.80
705	Renewal Tungsten battery	.40	. 80
1193	Renewal Mazda bulb, 3.8 volts	. 13	. 26
2634	Nickel Plated Tubular Flashlight ½ x 615	2.00	4.00
790	Renewal Tungsten Battery	.30	. 60
1198	Renewal Mazda bulb	. 13	.26
	_		

Battery and Bulb Tester



#### **EVEREADY SPECIALTIES**







No. 6980

List

No.

Silver Plated Tungsten Flashlights W. E. Mfrs. List W. E. List Mfrs. List Each List Each No. Each Each 750 Renewal Tungsten battery... 1180 Renewal Mazda bulb, 2.5 volts 6980 Size 11 x 11/4 x 21/2 inches **\$0.30 \$0.60** complete...... \$1.25 \$2.50 . 13 . 26 . 60 1.50 3.00

.30 6982 Size ¾ x 2 x 2 15 complete...
751 Renewal Tungsten battery... 700 Renewal Tungsten battery... 1179 Renewal Mazda bulb, 2.5 volts 26 . 35 .70 1181 Renewal Mazda bulb, 3.8 volts 6981 Size 3/4 x 13/8 x 2 1/4, complete... 1.252.50 . 13 . 26 Portable Searchlights W.E.

List No.		Size Mfrs. List Each	List Each
2659	Portable type, complete	$1\frac{1}{2} \times 8\frac{1}{2} \text{ ins.}  \$3.00$	\$6.00
705	Renewal Tungsten battery		.80
1193	Renewal Mazda bulb, 3.8 volts		. 26
2653	Portable type, complete	$1\frac{1}{2} \times 13$ ins. 4.00	8.00
715	Renewal Tungsten battery		1.40
1195	Renewal Mazda bulb, 6.2 volts		. 26

Nos. 2637 and 2638 appeal especially to firemen, policemen and watchmen who need a searchlight of great power. List Each List No. Mfrs. List Each 2637 Portable type, brass heavily nickel plated......  $1\frac{1}{2} \times 8\frac{1}{2}$  ins. \$3.25 \$6.50 705 .40 Renewal Tungsten battery..... .80

1193 Renewal Mazda bulb, 3.8 volts ..... 26 . 13 2638 Portable type, brass heavily nickel plated...... 1½ x 6½ ins. 2.755.50 790 Renewal Tungsten battery ..... .30 . 60 Renewal Mazda bulb, 2.9 volts.... 1198 . 26

#### Pistol Light

This is a perfect copy of an automatic magazine pistol of the latest type. When the trigger is pressed, a instead of a destructive bullet, a bright beam of light leaps from the muzzle and

continues as long as the pressure lasts. Fits the pocket like a "gun." Strongly made of brass and furnished in gunmetal finish. Makes an instant appeal to those who wish to combine novelty with utility.

List No.	,	Mfrs. List Each	List Each
	Pistol Light, complete		\$3.00
750	Renewal Tungsten battery	.32	60
1180	Renewal Mazda bulb, 2.5 volts	. 13	. 26

Tungsten Gas and Range Lighters

The Gas Lighter has a socket which is used to turn on the gas if the fixture is The same hand that turns on the gas presses the switch that operates the lighter. When this switch is pressed a current is projected through the platinum coil, contained in the perforated tip of the lighter. This coil instantly becomes white hot and stays in that condition as long as the switch is held down. No draught can blow it out. The shape and length of these lighters make them invaluable where the Welsbach type of burner is used.

The Range Lighter operates in the same way, but there is a difference in design. The hand is far from the flame when it ignites, preventing burned fingers.

Battery case of vulcanized fibre. All metal parts nickel plated. W. E. List No. Mfrs. List Each List Each Range Lighter.
Renewal Tungsten battery. 2823 \$1.50 \$3.00 790 .30 . 60 Gas Lighter ..... 2.00 **2824** 4.00 Renewal Tungsten battery.... 790 .30 . 60 No. 28249 Gas Lighter Renewal Tip (for either lighter).... 2831 \_00**25**|e .50

135

Electrical House Goods and Novelties

#### EVEREADY SPECIALTIES









No. 4708

Nos. 4706, 4707

No. 4709 Electric Lantern

Lantern No. 4702

#### Tungsten Lanterns

The lens and reflector of this new lantern have been specially designed to project an intense, white, concentrated beam for a great distance.

Mfrs. List W. E. List	Mfrs. List <b>W. E. Lis</b> t										
List No. Each   List No.	Each <b>Each</b>										
4702 Tungsten Search Lantern, complete	Mazda bulb.										
complete \$5.50 \$11.00 6.2 volts											
710 Renewal tungsten battery .75 1.50	***************************************										
<b>.</b>											
Eveready Lantern No. 4708											
4708 Lantern complete \$3.50 \$7.00 [ 1199 Renewal Maz	da lamp, 4 volts \$0.13 \$0.26										
775 Renewal tungsten battery .45 .90	,										
•											
Tungsten House Lamps											
These house lamps cannot blow out or up. If knocked over there											
Nos. 4703 and 4704 have battery cases of wood, well finished and nick	el trimmed.										
4703 House lamp complete \$3.00 \$6.00    4706 House lamp	complete \$2.00 \$4.00										
734 Renewal tungsten battery .45 .90   703 Renewal tungsten	ngsten battery .35 .70										
1199 Renewal Mazda bulb, 4 volts 13 26 1190 Renewal 14704 House lamp complete 5.00 10.00 3.8 volts 719 Renewal tungsten battery 75 1.50 4707 House lamp, 1195 Renewal Mazda bulb, 734 Renewal tungsten battery 734 Renewal 1990 Renewa	Mazda bulb,										
4704 House lamp complete 5.00 10.00 3.8 volts											
719 Renewal tungsten battery .75 1.50 4707 House lamp.	complete 3.50 7.00										
1195 Renewal Mazda bulb. 734 Renewal tur	ngsten battery .45 .90										
6.2 volts	da bulb, 4 volts .13 .26										
	,										
Eveready Electric Lantern											
Lantern 4709 is similar in size and shape to the popular railroad lante	rn. It takes a regulation globe										
with No. 734 battery and 1199 Mazda lamp.											
4709 Lantern complete \$2.00 \$4.00    4712 Lantern (sa	ame as No.										
734 Renewal tungsten bat- 4709 excep											
terv	ngsten battery .75 1.50										
1199 Renewal Mazda bulb, 4 1195 Renewal	Mazda bulb.										
volts											





Eveready Fountain Pen Flashlight

Just like a fountain pen—made in either nickel or black enamel with clip contact as shown in illustration.

Mfrs. List W. E. List Each Each 2683 Black enamel clip contact. . . \$1.00 \$2.00 2684 Nickel-plated clip contact..... 1.00

Electric Tungsten Candles
The Eveready Electric Candles are self-contained, carrying their own battery and producing their own current and require, of course, no matches. 1650 Highly finished enameled candle and nickel base

complete	<b>\$</b> 3.50	\$7.00
753 Renewal tungsten battery	40	.80
1113 Renewal Mazda bulb. 4 volts	.45	.90
1657 Electric Candle complete nickel	1.00	2.00
791 Renewal tungsten battery	.30	.60
1192 Renewal Mazda bulb. 2.7 volta.	0.013	26



No. 1657

#### **EVEREADY TUNGSTEN BATTERIES**

The Eveready Tungsten battery is the result of years of scientific research and experiment. It was through the introduction of Tungsten batteries that the flashlight was brought out of the class of novelties and made thoroughly practical for everyday household and commercial use.

Every battery is packed in a patented sealed carton.

P		No. o Cells		Width		Mfrs. List Each	W. E. List Each			No. of Cells		Width	Dept	Mfrs. List h Each	W. E. List Each
	711 715 790 791	3	9½ 11¾ 4¾ 3¾	13/8 13/8 13/8		.45 .70 .30	.90 1.40 .60		724	5	3	4	23/4	<b>\$</b> 0.75	\$1.50
U	701 720 753	3 2 3	43/4 43/4 7	1 1 1		.45 .35 .40	.90 .70 .80	o Topic	731	5	3	65%	11/2	.75	1.50
	700 703 750 751	2 3 2 3	11/8 25/8 21/4 21/4	$1\frac{1}{8}$ $2\frac{7}{16}$ $1\frac{5}{16}$ $2$	16 78 11 11	. <b>3</b> 0 .35 .30 .35	60 70 60 70		752	3	316	4	13/8	. <b>4</b> 5	.90
	792 793	2 2	2½ 3¼	15/8 21/8	<del>11</del> 1	. <b>3</b> 0 .35	. 60 70		712	3	2½	31/8	11/8	. 40	.80
	734	3	3	4	13/8	. <b>4</b> 5	. 90		723	3	3	21/2	•••	. <b>4</b> 0	. 80
	722	3	3	4	13/8	.45	90		710 707	5 5	<b>3</b> 3	35/8 35/8			1.50 1.50
	719	5	3	4	2¾	.75	1.50		716	5	6½	31⁄8	1½	.75	1.50

#### Eveready "Three Crescent" Battery



No. 892

Eveready "Three Crescent" battery is manufactured from the highest grade most carefully selected materials obtainable.

List	•		Size over a	all inches	Mfrs. List	W. E.
No.		Height	Width	Depth	Each	Each
803	Three Crescent battery			% in.	\$0.27	
805	Three Crescent battery	7 ins.	$1\frac{3}{8}$ ins.		.30	. 60
850	Three Crescent battery	$2\frac{1}{4}$ ins.	$1\frac{5}{16}$ ins.	11 in.	.22	.44
851	Three Crescent battery	$2\frac{1}{4}$ ins.	2 ins.	$\frac{11}{16}$ in.	.27	.54
890	Three Crescent battery	$4\frac{3}{4}$ ins.	$1\frac{3}{8}$ ins.	7 ins.	.22	. 44
891	Three Crescent battery	3¾ ins.	1 in.	$3\frac{1}{4}$ ins.	.22	.44
892	Three Crescent battery	$2\frac{1}{2}$ ins.	1% ins.	13 in.	.22	. 44
	100	Digit	izad by	()()()()()()	·	

136 Electrical House Goods and Novelties



# A STATE OF THE STA

Pyrene Extinguisher

J-M Fire Extinguisher with Bracket

#### FIRE EXTINGUISHERS

Pyrene Fire Extinguisher

This extinguisher is the most efficient and practical device known for the protection of electrical risks. It is used extensively by steam railroads, traction companies and power plants throughout the United States and Canada.

Pyrene is also recognized as the most effective extinguisher of incipient fires in highly inflammable materials, such as gasoline, benzine, kerosene, oils, etc.

Re	tail Price	List Price
Brass fire extinguisherseach	\$10.00	\$16.00
Nickel-plated fire extinguisherseach	10.50	16.80
Pyrene liquid for refilling (in quart, 2 quart and		
gallon cans) per gallon	<b>5</b> .00	8.00
Brackets for holding extinguishers (steel)	.50	.80
Brackets for holding extinguishers (brass)	.75	1.20
Brackets for holding extinguishers (nickel plated).	1.00	1.60

Metal Wooden Metal Wooden

Boxes for (1) extinguisher with glass front \$1.00 \$1.50 \$1.60 \$2.40 Boxes for (2) extinguishers with glass front 1.50 2.00 2.40 3.20 Boxes for (3) extinguishers with glass front 2.00 2.50 3.20 4.00

Note: Wooden boxes furnished painted or varnished. Metal boxes furnished in red enamel.

#### J-M Fire Extinguisher

The J-M Fire Extinguisher can be used in the ordinary pump-as-you-use fashion, or by pumping up air pressure with the nozzle closed, then releasing a steady, powerful stream which shoots straight to the base of the flames. This method of operation is invaluable when fire springs up in a tight corner where you cannot pump and aim at the same time because with the J-M you do not have to pump while the stream is in play.

Deadly to fire of any origin, including oil, grease, gasoline, kerosene and electric arc on which other chemicals and water are often ineffective and dangerous.

Sealed for safety. This exclusive feature discourages tampering and makes inspection easy.

J-M Extinguishing Fluid for recharging is a non-conductor, and will extinguish electrical fires without injury to the operator or apparatus.

The J-M Fire Extinguisher is inspected, tested and labeled by the Underwriters' Laboratories, Inc., under direction of the National Board of Fire Underwriters.

#### **EXTINGUISHERS**

LATINGUISILI				
	East of the	ne Rockies	West of the	Rockies
	Retail Price		Retail Price	
Nickel plated with black enameled wall or truck bracket	\$10.00	\$15.00	\$10.50	\$15.76
Brass with black enameled wall or truck bracket	10.00	15.00	10.50	15.76
WALL OR TRUCK BRA	CKETS			
····			Retail Price	List Price
Black enameled bracket, wall type	<i>.</i>	eac	h \$0.50	\$0.75
Nickel plated bracket, wall type				1.50
Black enameled bracket, truck type		eac	h 1.00	1.50
Nickel plated bracket, truck type	· · · • • · · · · ·	eac	h 1.00	1.50
FLUID				
Quart cans	. <b></b> .	per qua	rt \$1.50	<b>\$2.26</b>
Gallon cans		per gallo	n 5.75	8.60
50 or 110 gallon iron drum		per gallo	n 5.50	8.26
SEALS AND RE-SEALING	PRESSES			
Plain, for closing lead seals without showing any imprint			h \$6.00	\$7.50
Private, showing customer's initials, monogram or simple symi				10.50
Lead seals (furnished in multiples of 250)		per N	M 6.00	9.00
Steel wall box (painted red, no glass)		eac	<u>h</u> _2,00e	3.00
Electrical House Goods and Novelties	L	ngilized by	300816	

#### Western Electric

# Western Electric NEW LIFE VIBRATORS

New Life Vibrators are made in five different styles, viz.: Types A, B, C, D and F. All of these types give both the rubbing and percussion strokes so essential in high-grade vibrators. They represent the highest point of mechanical and electrical perfection yet reached by any vibrator on the market and are

highest point of mechanical and electrical perfection yet reached by any vibrator on the market and are sure to give the service and satisfaction the user has a right to expect.

Thousands of them are in use throughout the country and every single one is a tangible testimonial of their wonderful superiority.

Every New Life Vibrator is guaranteed for a period of one year to be free from all mechanical and electrical defects.

With every vibrator a 300 page bound book on "Health and How to Get It," together with complete instructions for proper use of the vibrator, is given free. This book tells the user how to get the best results and just how to use New Life Vibrators intelligently.



300 Page Bound Book





# Western Electric New Life Vibrator TYPE A

The Type A vibrator has an aluminum casing making it light and compact. It has a fine finish, evenly balanced and is the ideal machine for home use. Each Type A outfit consists of one vibrator (with cord and attachment plug for attaching it to the electric light fixture) and six applicators, all packed in a handsome carrying case of black leatherette lined with red satin. A speed-regulating switch enables the motor to be run fast or slow. Specify whether vibrators are for A.C. or D.C. circuits. Standard voltage 110-120 volts, A.C., 25 to 60 cycles, and D.C. 100-120 volts. Price includes 300 page bound book on "Health and How to Get It," and complete instructions for proper use of vibrator.

List		Retail Price	List Price
No.		Each	Each
A	Vibrator, complete with six (6) applicators, cord and plug	<b>\$17</b> . <b>50</b>	<b>\$22.00</b>

#### TYPE C

Designed especially for professional use. It is of heavier construction and has a more powerful motor than the vibrator designed for home use. The deep, penetrating vibrations produced by the Type C instrument make it particularly suitable for cases requiring energetic treatment. Widely used in hospitals, sanitariums and Turkish baths. The vibrator and six applicators come packed in a handsome black leatherette carrying case, green velvet lined. A speed-regulating switch enables the motor to run fast or slow. Specify whether vibrators are for A.C. or D.C. circuits. Standard voltage 110-120 volts A.C., 25 to 60 cycles, and D.C. 100-120 volts. Price includes 300 page bound book on "Health and How to Get It," and complete instructions for proper use of vibrator.

List		Retail Price	List Price
No.	,	Each	Each
$\mathbf{C}$	Vibrator complete with six (6) applicators, cord and plug	\$25.00	\$32.00
	Delivery F. O. B. Racine, Wis. For warehouse deliveries write nearest house.	)qle –	

#### VIBRATORS AND MEDICAL BATTERIES

#### Western Electric New Life Vibrator TYPE D

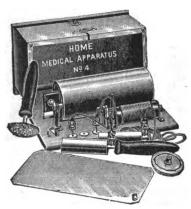


Especially designed to meet the demand for a light, efficient and low-priced vibrator for family use and for the professional hairdresser or masseur who calls on patrons at their homes. This type has no speed regulator, but it may be stopped or started instantly by means of a push button in the handle. Six applicators are furnished with the Type D vibrator. This vibrator is provided with universal motor, which will work on either A.C. or D.C. circuits. Standard voltage 110-120 volts A.C., 25 to 60 cycles and D.C. 100-120 volts. Price includes 300 page bound book on "Health and How to Get It," and complete instructions for proper use of vibrator.

Dist	Retail Price	LIST Price
No.	Each	Each
D Vibrator with universal motor an	d	
six applicators		\$18.00
Extras	. 4-2.00	<b>\$10.00</b>
Sponge applicators	. \$0.75	1.00
Brush applicators	. 1.00	1.50
Rectal applicators	1.50	2.00
	. 1.00	2.00
All other type applicators	50	. 50



No. 2233 Medical Battery



No. 2204 Unpacked Home Medical Apparatus

#### The Apollo Medical Battery

This is a two cell medical battery and is recommended where more current is desired than can be obtained from the single cell type.

It is furnished in highly polished oak or mahogany case. All metal parts finished in polished nickel. Dimensions 9 x 71/4 x 8 inches high. Furnished with two metal hand electrodes, two sponge electrodes, one foot plate electrode, one massage roller electrode, one hair brush electrode, two wooden electrode handles and one pair of green and red silk conducting cords.

It has battery and pole changing switches, three binding posts for inserting the cord tips. Induction coil arranged with graduated scale.

All metal parts heavily nickel plated and highly polished.

The above left-hand illustration shows the cover raised, exposing the coil, etc.

The right-hand illustration shows the electrodes arranged in the compartment in which they should be kept when not being used.

An Electropathic Guide with each apparatus, giving full directions for using the electrodes, care of battery, etc. List Retail Price †List Price

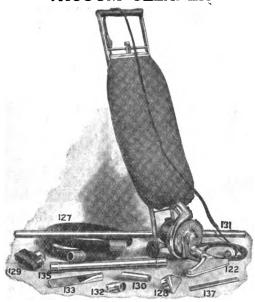
No. Each Each 2233 Apollo medical battery. \$14.00 \$16.80 Home Medical Apparatus

The Home Medical Battery is contained in a highly polished oak or mahogany case with nickel plated handle. Owing to its simplicity and entire absence of acids or liquids, it is particularly suited for the use of those who are entirely unfamiliar with the care and precautions necessary for handling the ordinary acid batteries. Dimensions of the case are  $9 \times 5 \%$  inches; weight, 5 % lbs. 2204 Home No. 4 apparatus, batteries and electrodes complete . . . \*Delivery F. O. B. Racine, Wis. \$7.50

†Delivery F. O. B. Factory, New York. For warehouse deliveries write nearest house.

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## Western Electric Western Electric VACUUM CLEANER



No. 11 Vacuum Cleaner with Tools No. 11 Portable Type

With a Western Electric Vacuum Cleaner you can clean in one-fourth the time that it takes with the broom and dust rag. In ordinary sweeping and dusting, the surface dirt is simply dislodged to scatter its unhealthful germs in the air we breathe.

With a Western Electric Vacuum Cleaner—the modern, sanitary method of cleaning—the dirt and dust

are actually drawn out of the carpets, rugs and draperies by a vacuum into a bag which may be easily detached and emptied.

The extension tool—furnished as a part of the regular equipment—will enable one to reach the outof-the-way places—under heavy furniture that cannot be moved.

The comfortable horizontal handle—not found in any other machine—provides the most natural way for pushing a cleaner. A special device in the cleaning tool picks up all the dirt, threads and ravelings. This is the cleaner not set like a broom.

By means of the hose attachment and different nozzles, the Western Electric Vacuum Cleaner can be used for many difficult cleaning operations. Dirt that cannot be gotten at in any other way is easily removed. A thin nozzle is very effective in cleaning the radiators. It gets in between the pipes and removes the

dust and dirt. It reaches the corners which are always difficult to clean.

The handle of the cleaner remains in an upright position when not in use. For cleaning upholstered furniture, mattresses, etc., the hose attachment is most valuable. The dust and particles of dirt which cannot be beaten out or reached with the whiskbroom are easily drawn out by the strong suction of the vacuum cleaner. By disconnecting the bag and attaching the hose to the bag connection, the cleaner may be used as a blower for blowing the dust out of the crevices, renovating pillows and drying the hair.

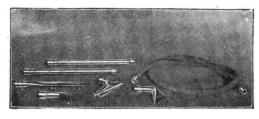
The old method of beating the draperies not only destroys their crispness and luster, but soon wears them out. With the extension handle and hose attachment, one can take all the dust and dirt out of the draperies without injury to the most delicate of fabrics. It enables the user to reach the tops of the doors

and mold	lings, the plate rails and pictures high above the head.		
List No.	Description	List Pri	ce Each
11	Vacuum cleaner with tools 122, 135 and 137		\$80.00
	(Complete equipment for floors and floor coverings.)		
11	Vacuum cleaner with tools 127, 128, 129, 130 and 131		95.00
	(For all ordinary household cleaning requirements.)		
A co	mplete and efficient tool equipment—light, substantial and beautifully finished, ha	is been de	esigned
for use w	ith this cleaner.		•
166	General cleaning tool		\$4.00
127	Eight foot length of hose		5.50
128	Upholstery tool		1.80
129	Brush for walls, moldings, draperies, etc		3.00
130	Short handle for use with tools 128 and 129 at end of hose		1.20
131	42 in. extension handle for use at end of hose		4.00
132	Elbow attachment for changing angle of tools		1.50
100	Tilemanne de al fam un lied ann l		1 00

Library tool for radiators, bookcases, etc..... 1.20 135 2.50 Extension tool for cleaning under furniture, etc..... 136 Dust bag... 2.00 137 1.00 Delivery F. O. B. destination.

# Western Electric VACUUM CLEANERS





Extra Tool Equipment

#### No. 1 Cleaner

The No. 1 Cleaner is suitable for a small house, apartment or bungalow. Practically the entire cleaner with the exception of the drum and the motor is made of aluminum. It weighs complete only 13 lbs.

No Dirt Through Fan. A vital difference between the No. 1 and most other small portable fan type cleaners is that, instead of the dirt and dust being drawn through the fan, and expelled into the bag, the fan is placed beyond the closed end of the bag, and the dirt is drawn into the bag; no dirt passing through the fan. Dirt going through the fan except where liberal clearances are provided is liable to cause trouble.

the fan. Dirt going through the fan except where liberal clearances are provided is liable to cause trouble.

Horizontal Bag. The bag being mounted horizontally, the dust and dirt fall to the lower side. The variation in the volume of air due to lifting the tool from the work constantly inflates and deflates the bag with the consequent effect of shaking down the dirt. This arrangement is an important and distinctive feature of Western Electric Cleaners.

Tool Attachment and Extension. The tool is separately attached to the cleaner, fitting into a taper socket. This arrangement permits the use of an extension for the tool, for cleaning under couches or other low places, or for a hose connection without dismantling the cleaner or using cumbersome or leaky attachments necessary in other cleaners.

Emptying Arrangement. The bag is attached to the front cover and the two are removed from the cleaner as a unit. The bag therefore need not be opened until it reaches the point of final disposal of the dist. There is no danger of spilling dist inside the house.

of the dirt. There is no danger of spilling dirt inside the house.

Handle and Locking Device. Another distinguishing feature of the No. 1 Cleaner is the adjustable handle hinged to the body of the cleaner in such a way that, in storing the machine in an out-of-the-way place, the handle is locked in a vertical position, and a minimum space for storage is required. The same device locks the handle at the proper angle for operating the cleaner. It operates with the foot, thus avoiding the necessity of stooping.

The handle and cord are easily removable from the cleaners. The handle forms a casing for the electric cord and fits into a connecting socket near the motor. The handle and the incased cord are removed by pulling the handle from the cleaner.

pulling the handle from the cleaner.

Mounting. The Cleaner is mounted on two wheels just under the motor. These wheels have large round rubber tires which give resiliency and exceptionally long wear. They cannot scratch or injure hardwood floors. The machine is perfectly balanced to get just the right pressure on the tool, with the minimum of effort in operation.

General. It will be seen that every possible refinement of detail in design and construction has been incorporated in this cleaner. It is a real cleaner—not a toy, and should not be compared with the multiplicity of so-called cleaners on the market, offered at a lower price than a good cleaner could possibly be built for.

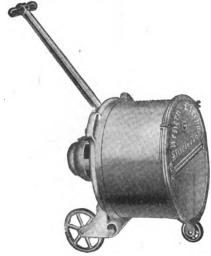
	List Price and Data	
List	•	List Price
No.		Each
1	Cleaner complete with extension cord and cleaning tool	\$90.00
	Extra Tool Equipment	
Tool N	o	
3	Upholstery tool for stairs, upholstery, draperies and rugs	<b>\$</b> 2.20
6	Five inch clothes brush, also for dusting walls, cabinets	4.50
7	Tibram tool for cleaning books on shelves missen helps in dealer andictors at	4 00

adapted to No. 1 Cleaner.
Delivery F. O. B. destination.

Western Electric







No. 3 Cleaner

#### Nos. 2 and 3 Vacuum Cleaners

These are larger than the No. 1 Cleaner, and are adapted to use in rather large residences with somewhat

heavier rugs and furnishings.

heavier rugs and furnishings.

They have the same superior features in respect to the arrangement of the bag, large clearance, high efficiency of the fan, low center of gravity and other essential respects. They are built almost entirely of aluminum with the exception of the drum and the motor, giving an exceedingly light but strong construction. The motor and fan are mounted on the same shaft and run in self-aligning ball bearings in a dust-proof casing.

Twelve feet of high-grade, non-collapsible rubber hose and twenty feet of electric cord are furnished with each cleaner, giving the machines a radius of operation of thirty-two feet from the lamp socket. Several rooms can be cleaned without taking down the cord. A slight pull on the hose will draw the cleaner over the floor. They roll eachly over door sills and rugs, and because of the horizontal mounting will not topple

the floor. They roll easily over door sills and rugs, and because of the horizontal mounting will not topple over like many vertically mounted cleaners. Being perfectly balanced on large cushion tired wheels, they can be rolled from step to step in moving up or down stairs like a perambulator. The ease with which they can be handled is in striking contrast to other cleaners which have to be lifted bodily. List No. List Price Each

.. \$195.00 3 Cleaner complete, with tools as listed below . . . 250.00



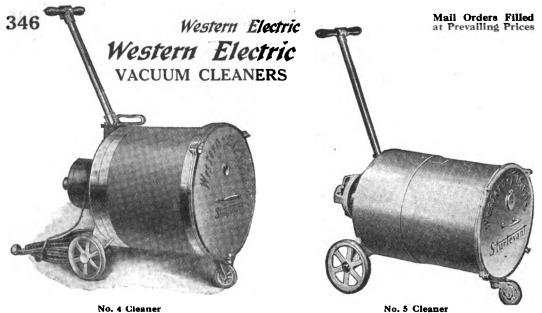




Tools for No. 3 Cleaner

#### Tool Equipments

	loois ordered extra; prices are as follows						
Tool No.	For No. 2 Cleaner	List	Price Each				
1	8 in. floor tool		<b>\$8.50</b>				
3	Upholstery tool		2.20				
112	12 ft. hose with taper connections		17.00				
16	1¼ in. curved floor tool handle		7.50				
140	20 feet of electric cord with plug		4.50				
61	Hardwood floor tool attachment (not shown)		4.00				
For No. 3 Cleaner							
1	8 in. floor tool, swivel joint, wide slot		<b>\$</b> 8. <b>50</b>				
3	Upholstery tool		2.20				
5	10 in. wall brush, swivel joint		11. <b>0</b> 0				
141	20 ft. electric cord, plug and switch		6.00				
112	12 feet of hose (suction) with taper connections		17,00				
16	1¼ in curved floor tool handle		7.50				
61	Hardwood floor tool attachment (not shown)		4.00				
Del	ivery F. O. B. destination.	Įle					



No. 4 and No. 5 Cleaners

These are exceptionally high powered portable cleaners. They are designed for the exacting requirements of large office buildings, schools, clubhouses, and other public buildings, where considerable quantities of dirt and litter must be disposed of rapidly and effectually.

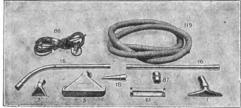
Features of Construction

They are equipped with multiple fans. The No. 4 has two fan units and the No. 5 has four fan units. In these so-called multi-stage fans the air is drawn into the first fan and propelled into the fan ahead, receiving an impulse from each fan until it is finally discharged into the exhaust pipe. This gives a much higher velocity and suction than could be attained with a single fan. They have the same superior features

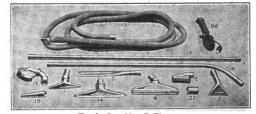
of design and construction as the smaller cleaners.

Attention is especially called to the fact that the motors for Western Electric-Sturtevant Vacuum Cleaners have been designed throughout especially for vacuum cleaner work; one object having been to avoid excessive starting currents on alternating current circuits. All sizes of portable cleaners up to and including the No. 5 can be operated from the ordinary lighting circuits without change of fuses. For most other cleaners the fuse capacity must be raised, particularly for the higher powered portable cleaners, beyond the limits permitted by the underwriters.

st No.		List Price
4	Cleaner complete, with tools as listed below, 110 volts universal	
4	Cleaner complete, with tools as listed below, 220 volts universal	400.00
5	Cleaner complete, with tools as listed below, 110 volts universal	600.00



Tools for No. 4 Cleaner



Tools for No. 5 Cleaner

# Tool Equipments Tools ordered extra; prices are as follows FOR NO. 4 CLEANER

Tool		List Price	Tool		List Price		
No.		Each	No.		Each		
1	8 in. floor tool	\$8.50	61	Hardwood floor tool attachment	\$4.00		
3	Upholstery tool	2.20	138	Electric cord plug and switches	7.00		
5	10 in. wall brush, swivel joint		87	Reducing coupling	4.00		
16	11/4 in. curved floor handle	7.50	119	12 ft. 1½ in. hose			
18	Blowing nozzle						
	FOR NO. 5 CLEANER						
_							
1	8 in. floor tool	<b>\$</b> 8. <b>50</b>	. 16	Curved floor tool handle	<b>\$7.50</b>		
3	Uphoistering tool	2.20	17	Wall handle, 4 feet long	6.50		
4	12 in. hardwood floor tool		18	Blowing nozzle			
5	10 in. wall brush		138	25 ft. electric cord switch and			
6	5 in. clothes brush	4.50		plug	7.00		
7	Library tool		32	Taper coupling			
14	12 in. floor tool	9.00	49	25 ft. hose (Light)	28.00		
I	Delivery F. O. B. destination.			Signizo Soj, Co S S T C T I			



No. 6 Cleaner

The No. 6 is an exceedingly powerful cleaner. It has a multi-stage fan of five fan units driven by a 2 H.P. motor. It has a dust bag capacity of 4600 cu. in. when mounted in the cleaner drum. It is the most powerful and efficient portable cleaner on the market. Designed for street railway, factory and heavy indicated the most of the market. Designed for street railway, factory and heavy indicated the most of dustrial work and will successfully take care of any scrap litter or dirt which would be within the scope of any vacuum cleaning system. It has been built in recognition of the principle that losses of electrical energy transmitted through wires are very low, while losses in velocity, volume and suction of air moving through a piping and hose system are—comparatively—very high. Wherever conditions will permit bringing the cleaning apparatus close to the work this cleaner will give results superior to most stationary cleaner installations of similar capacity and cost. List List Price

Each \$1050.00

Note: The application of this cleaner is so varied that the choice of tools is left to each purchaser to suit his individual requirements.

### No. 7 Cleaner

The No. 7 cleaner is designed to use either as a portable or sta-

tionary machine.

The No. 7 has a two-stage fan and a powerful motor. It is attached to the piping system and electric service as shown in the cut. This cleaner will do thoroughly satisfactory work in moderate sized homes of ten or twelve rooms or less where the system can be operated through 25 feet of 2 inch pipe and 25 feet of 1½ inch hose. It has been thoroughly tested out under these conditions in comparison with popular types of permanently installed stationary cleaners of the same or higher cost and found to give equal or superior performance.

LIST		Tast Luce
No.		Each
7	Cleaner complete with tools as listed below	<b>\$</b> 390 00
•	Cleaner complete with tools as hister below	4000.00

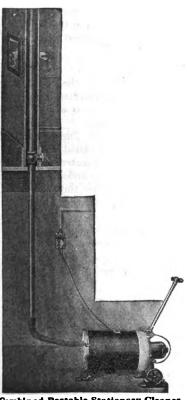
TOOL EQUIPMENT Tools ordered extra; prices are as follows: For No. 7 cleaner

Tool		List Price
No.		Each
1	8 in. general cleaning tool	\$8.50
3	Upholstery tool	2.20
16	1 ¼ in. curved floor handle	7.50
49	25 ft. 1½ in. hose	28.00
61	Hardwood floor tool attachment	4.00
138	25 ft. No. 16 electric cord with plugs and switch	7.00
	Almana manifes in andoning whathair the aleanon is to be	

Always specify in ordering whether the cleaner is to be used as a portable-stationary or as a portable cleaner only.

TABLE OF DATA—ALL CLEANERS

17000	V- 25						
	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7
Horse power	1/12	1/6	1/6	3/10	1/2	1	3/10
Motor universal or ne	ot. No	Νo	Νo	Yes	Yes	No	Yes
Net weight less tools.	14	41	50	70	112	560	75
Shipping wt. with too	ls. 33	96	140	140	235	800	150
Net export		109	150	(151)	220	> 850	165
-		Digiti		ehold			tions

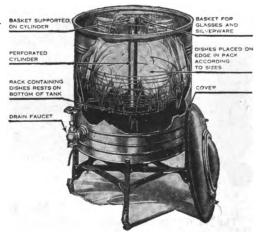


Combined Portable Stationary Cleaner

# Western Electric Western Electric "GEYSER" DISHWASHER



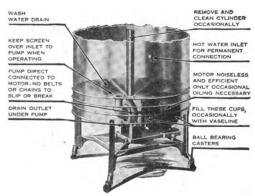
"Geyser" Dishwasher



Interior View

### Electric Dishwasher

Operation. The dishes are brought from the table and prepared in the usual way and set direct into a rack designed to hold the various shapes and sizes, the cups and smaller pieces being placed in the inner circles while the glassware and silver are laid in a wire basket which fits into the top of the machine. About six or eight quarts of water are then run into the tank and a little liquid soap added to make suds. The rack of dishes and the basket of glasses and silverware are then placed in the machine, the cover fitted on, and the machine started by attaching the cord to any electric lamp socket and turning the switch. Soapy water is forcibly circulated over the dishes by the pump, through the perforated pipe in the center of the machine, until every particle of food and grease is thoroughly washed off. Less than a minute is required for washing the dishes.



Machine Self-cleaned. With the rack and basket out of the tank, running the machine for a minute with clean, hot water left in is sufficient to thoroughly cleanse the tank and pump.

Construction. The "Geyser" Dishwasher is made either of heavy copper, nickel plated or Premier Brand stannic metal, non-rusting, a material suitable for the average home. The center cylinder is of brass and copper nickel plated inside and out, threaded at the top and bottom for convenience in cleansing and ready removal. The racks are made of non-rusting wire and designed to hold a large number of dishes in direct contact with the streams from the cylinder.

Pump. The pump is direct-coupled to motor shaft for 60 cycles and direct current.

Motor. The electric motor is a ¼ horse-power unit, especially designed for use with these machines. The motor and pump are placed entirely underneath the tank where they cannot be damaged by water. All castings standard.

Dimensions. Diameter 25½ inches; length 36 inches.

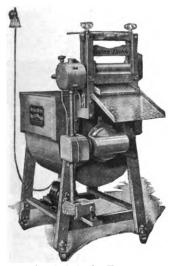
List Price
No.

Each

\$170.00 220.00

# Western Electric

# Household Specialties



Small Cylinder Type asher and Wringer



Dishwasher

# Washer and Wringer

This type of Western Electric washer is especially adapted for small size families of two or three people where the wash is not large or where space for doing weekly wash is limited, such as in small apartments, particularly where laundry tubs are located in the kitchen. It has a capacity of 4 sheets or 8 shirts. Except for its smaller capacity this washer is essentially the same as the large size Western Electric cylinder type. It has a two roll reversible 10 inch wringer. The cylinder automatically reverses every six and one half times like in the larger washer; and the grade of material used throughout is the same as in the higher priced washer. The machine is equipped with a friction clutch of the cove type, instead of multiple disk clutch, which is used on larger type machines. The floor space required by machine is only 22¾ x 27 inches, the narrow dimension being width from side to side.

List Price Each 

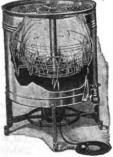
### · Electric Dishwasher

This dishwasher is just right for the small apartment or the average sized family, occupying little space,

handsome in appearance and at a price within the reach of all.

The washing is accomplished by the hot, soapy water being forced through the perforated pipe in the center of the machine and out over the dishes until every particle of food and grease is thoroughly washed

off. Less than five minutes is required for washing the dishes. As the dishes in the machine are all above the water and in a vertical position the water drains off, while the combined heat from the direct contact with the hot water and the contained head in the tank dries the dishes. The basket and rack are then removed and the dishes ready to put away. All the dishes in the machine are above the water level, so that when the motor is stopped the suds and food particles which, naturally, rise to the surface of the wash water, do not come in contact with the dishes.



Rack and Basket. Made of heavily tinned wire and designed to hold a large number of dishes in direct contact with the streams from the cylinder. The basket for glasses and silverware is also made of heavily tinned

wire and hangs from the top of the cylinder.

The Pump. Direct coupled to the motor shaft. It is noiseless and efficient, running at 5,000 revolutions per minute. Pump and fittings are made of special non-rusting material.

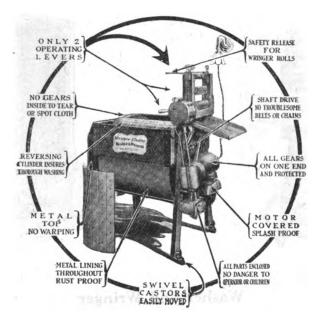
The Motor. Western Electric, especially designed for use with these machines.

Legs and Base. All castings are standard. Legs of the dishwasher are nickel plated and equipped with ball-bearing casters. The base and pump are aluminum painted. List No. \*List Price

Electric dishwasher, 110 volts D.C. or A.C..... 371846 **\$**135.00 Extra bottom dish rack..... 8.00 4.00 Extra top basket.....

Always specify voltage when ordering.
\*Delivery F. O. B. Factory, Buffalo, N. Y. For warehouse deliveries write nearest house.

# Washer and Wringer



# Washer and Wringer

All moving parts of the Western Electric Washer are enclosed.

This machine can be operated with perfect safety by any woman or child.

It is the safest washer made and the safest washer made is the safest washer to sell.

It is the only machine that has three free sides around which the operator can work without obstruction.

It occupies less floor space than any other machine of equal capacity.

capacity.

Has patented safety release on wringer which prevents tear-

ing of clothes due to clogged wringer.

There are no bolts or chains to slip or break—no complicated machinery to get out of order. The automatic reverse is accomplished by means of an absolutely new mechanical movement, having by far fewer parts than any other reversing cylinder machine on the market.

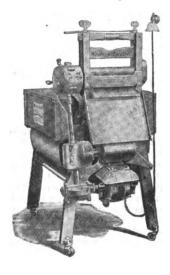
Simple. The machine is composed of but 35 parts against

Simple. The machine is composed of but 35 parts against more than 100 in the next simplest machine. Operated by only 2 levers—one for washing and one for wringing.

Operation. Machine operates on the reversing cylinder principle, which is conceded by experts to be the only correct method for washing clothes clean and without injury. The wringer has 2 rolls, reversible, and the rolls are made of the best Para rubber. This machine will do the washing of a family of four in one hour at a cost of only 2 cents for electricity.

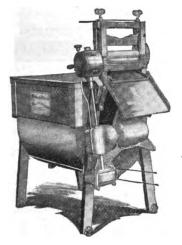
four in one hour at a cost of only 2 cents for electricity.

Sanitary. Tub is completely lined with metal, leaving no crevices or corners for the collection or absorption of impurities. Easily emptied by means of a faucet in bottom of machine.

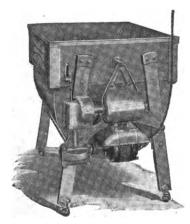


Туре	Material of Body	Caps Sheets	Shirts	Size of Wringer	Shipping Weight	List Price
AC B BC C	Steel Copper Steel Copper Steel	6 or 6 or 9 or 9 or 12 or	14 14 20 20 30	11 ins. 11 ins. 12 ins. 12 ins. 14 ins.	250 lbs. 250 lbs. 260 lbs. 260 lbs. 275 lbs.	\$200.00 250.00 250.00 300.00 330.00
CC Delive	Copper ery F. O. B. Chica	12 or ago, Ill. For		14 ins. eliveries write ne	275 lbs.	390.00

# Western Electric Washer and Wringer



Washer for Gasoline Engine or External Motor Drive



Washer Without Wringer

Washer for Gasoline Engine or External Motor Drive

In order to make the Western Electric Washing Machine practical for use where electric service is not available, it is supplied when required without a motor, but equipped with a grooved pulley of 134 inch diameter, so that it may be operated by a gasoline engine. The capacity of the engine may be anything from ½ H.P. up, and the pulley on the washing machine is designed for a ¼ inch or 36 inch round leather belt or rope drive. The engine speed and diameter of pulley should be such as to drive the pulley on the washer at 1750 R.P.M.

	Material	Capacity	Size of	Shipping	List
Туре	of Body	Sheets Shirts	Wringer	Weight	Price
A	Galvanized steel	6 or 14	11 ins.	225 lbs.	<b>\$</b> 150.00
AC	Copper	6 or 14	11 ins.	225 lbs.	200.00
В	Galvanized steel	9 or 20	12 ins.	235 lbs.	200.00
BC	Copper	9 or 20	12 ins.	235 lbs.	<b>250.00</b>
C	Copper	12 or 30	14 ins.	245 lbs.	<b>250.00</b>
CC	Copper	12 or 30	14 ins.	245 lbs.	310.00

Washer Without Wringer

All standard sizes and types of Western Electric Washing Machines are available without the wringer attachment. These are particularly desirable for institutions, small public laundries and others where the drying is done by a hydro-extractor. Thus the additional expense and complication of a wringer is avoided. The motor is the same size as on the standard washer, no reduction being made, due to the elimination of the wringer.

This machine is exceedingly simple as shown in the cut, and only one lever is required to operate.

Туре	Material of Body	Capac Sheets	city——— Shirts	Shipping Weight	List Price
A AC B BC C	Galvanized steel Copper Galvanized steel Copper Galvanized steel Copper	6 or 6 or 9 or 9 or 12 or 12 or	14 14 20 20 30 30	235 lbs. 235 lbs. 240 lbs. 240 lbs. 250 lbs. 250 lbs.	\$180.00 230.00 220.00 270.00 290.00 350.00

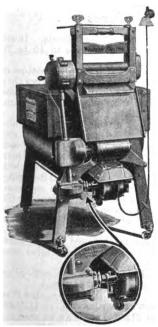


All standard washing machines are shipped out already equipped with a 1% inch grooved pulley on the motor shaft. This enables the user, if he desires, to use his washing machine to operate other household utilities like an ice cream freezer, ironing machine or mangle.

like an ice cream freezer, ironing machine or mangle.

The pulley is designed for a ¼ inch or ¾ inch round leather belt or rope drive, and operates at 1750 R.P.M.

Delivery F. O. B. Chicago, Ill. For warehouse deliveries write nearest house.



For Driving Other Equipment



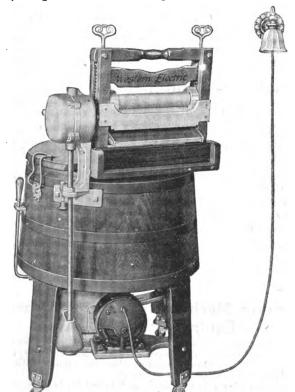
Washer and Wringer Type "D"





# "Dolly" Washer and Wringer

The Western Electric "Dolly" washer and ringer will wash and wring the clothes far better than the most skillful laundress could do at a cost not much greater than running an electric fan. Fourteen shirts or six sheets washed and wrung in fifteen to twenty minutes—wrung without putting a hand to the wringer—and at a cost of less than two cents for current. All moving parts are enclosed and all machinery is located underneath the tub out of the way. The cover of



parts are enclosed and all machinery is located underneath the tub out of the way. The cover of the machine is not cluttered up with machinery. There is not a single piece of mechanism on it, and it can be used as a table when wringing clothes back through the wringer. No exposed, complicated parts. No belts and chains to get out of order or to endanger the user or children.

### **Features**

Capacity. Fourteen shirts or 6 sheets. It will wash and wring a tub of clothes in 15 to 20 minutes.

Height. Thirty-four inches from bottom of floor to top of tub. This is 4 inches higher than the ordinary machine of this type. The machine does not have to be set up on a special platform for stationary tubs in the laundry.

Dolly type is made of the best quality white maple, polished smooth as glass to prevent any possibility of injuring the most delicate fabrics.

Body is made of the best quality Southern

Cypress with reinforced cypress cover attached.
Wringer is the very latest improved Swinging-Reversible type. It can be swung to any position, thus eliminating the bother of pushing the machine from one tub to another. The rolls are 11 x 13/4 inches and are made of the best pure

Para rubber.

Motor. Machine is equipped with a guaranteed motor that operates the washer and wringer.

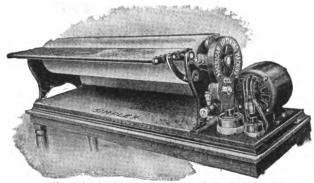
Direct Gear Driven. Helical cut gears packed in grease—absolutely noiseless.

Dolly type washer and wringer.....\$120.00 Shipping weight 212 lbs.

Delivery F. O. B. Factory, Chicago, Ill. For warehouse deliveries write nearest house.

# "SIMPLEX" IRONING MACHINES

The "Simplex" Ironers are simple and durable and can be operated with ease and safety by inexperienced help. The principal features of the "Simplex" are: A well padded roller, operating under adjustable spring pressure against an accurately machined and highly polished shoe, its concave face forming contact with the circumference of the padded roll. This shoe inclines to the rear and draws its heat from a burner which extends across its back for the full length. Motor attached machines are furnished with plug connected to ordinary light socket with the exception of the 48 and 56 inch ironers, on which connection should be made direct to the line. Prices include gas or gravity gasoline burners.

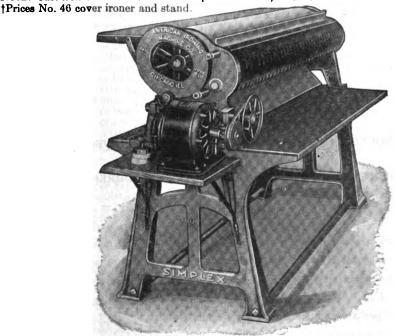


Nos. 32, 37, 42 and 46 Ironers, Motor Driven

Nos. 32, 37, 42 and 46 "Simplex" Ironers

5 "		Gas	G 11	77 777 77		Han	d Power	Belt	Driven	Moto	r Driven	*Extra
Roll Length Inches	H.P. of Motor	Consumed Cubic Feet per Hour	70'	K.W. Hour Consump- tion High	List No.	Wt. Lbs.	*List Price Each	Wt. Lbs.	*List Price Each	Wt. Lbs.	*List Price Each	for Electric Heat Coil
32 37	1/8 1/8	17 20	1 7/8	2.5	32 37	150	\$104.00 124.00	160	\$134.00 154.00	215	\$200.00 220.00	120.00
42 †46	1/6	23 26	11/8	4 4.8	42 46	190 350	144.00 204.00	200 360	174.00 234.00	255 420	240.00 304.00	140.00 160.00

Note: Cast iron base can be furnished up to 42 inches, at \$26.00 additional list.



Nos. 48 and 56 Ironers, Motor Driven
Nos. 48 and 56 "Simplex" Ironers

Roll	H.P.	Gas	Caralina	V W H		Hand	Power	Belt	Driven	Moto	r Driven	*Extra
Length Inches		Consumed Cubic Feet per Hour	Pints	K.W. Hour Consump- tion High	List No.	Wt. Lbs.	*List Price Each	Wt. Lbs.	*List Price Each	Wt. Lbs.	*List Price Each	for Electric Heat Coil
48	1/4	27	11/4	5	48	500		505	\$350.00	650	\$430.00	\$180.00
56	1/4	33	11/4	6	56	575		580	400.00	725	480.00	200.00

Ironing speed per minute, 32, 37, 42 and 46 inch rolls, 7 feet; 48 and 56 inch rolls, 8½ feet. Speed of pulley on 32, 37, 42 and 46 inch ironers, 580 R.P.M.; 48 and 56 inch ironers, 370 R.P.M. Diameter of pulley for 1½ inch flat belt, 4 inches; grooved, 75 inch round belt for Nos. 32, 37, 42, 46. 6 inches; for Nos. 48 and 56. 8 inches. Nos. 46, 48 and 56 are furnished with iron stands. For 110 or 220 volts A.C. or D.C. add \$3 list. For other than 60 cycle A.C. price is special. \*Delivery F. O. B. Factory, Chicago, Ill. For warehouse deliveries write nearest house.

### SIX



Side View Fan Tilted Up



Front View



Side View **Bracket Position** 

### Six Inch Universal Fan

### A LOW PRICED 6 INCH DESK OR BRACKET TYPE UNIVERSAL FAN

### OPERATES ON DIRECT OR ALTERNATING CURRENT

### 25 TO 60 CYCLES, 110 VOLT CIRCUITS

The Western Electric Six has become a permanent factor in the electric fan market. Its low cost, light weight, small operating expense and general adaptability has made it one of the most salable fans.

It can be placed on the table or desk or a shelf in an upright position, or suspended from the wall as a bracket fan, the change from desk to bracket type being made by simply loosening a thumb nut, swinging the base into the desired position, and tightening the nut again.

Each fan is furnished complete and ready for operation with a cord and plug. The bearings are oiled by means of a small oil cup which requires very little attention.

	Retail P	rice Each	List Price Each			
List	East of the	West of the	East of the	West of the		
No.	Rocky Mountains	Rocky Mountains	Rocky Mountains	Rocky Mountains		
6	\$6.95	<b>\$7.25</b>	\$12.50	\$13.00		
Finish, Statuary Bro	onze.					
				-		

Weights: net, 4 lbs.; shipping, 5 lbs.; case of 6, 35 lbs. Household Motor Applications 16-5



# Western Electric

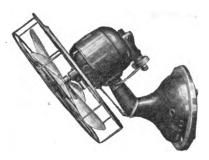
### DESK AND BRACKET FANS



12 Inch Desk and Wall Fan A.C., 4 Blades



9 Inch Oscillating Desk and Wall Fan A.C. and D.C.



12 Inch Desk and Wall Fan A.C., 4 Blades

### **Dull Black Finish**

List No.	Size	Туре	No. Blades	Speed	Watts at High Speed	Weigh Net	t Lbs. Shipping	†RetailPrice with Plug and Cord	†List Price with Plug and Cord

### FOR ALTERNATING CURRENT 60 CYCLE-110 VOLT CIRCUITS

D371-075 9 in.	Desk or bracket	4	1900-1600-1200	23	47/8	10	\$14.00	\$19.60
D371-077 9 in.	Oscillating	4	1800-1500-1100	24	534	īŏ	17.00	23.80
	Desk or bracket	4	1700-1550-1400	43	19	25	22.30	31.32
12111 12 in.	Desk or bracket	6	1150-1050- 950	25	19	25	23.50	47.00
12121 12 in.	Oscillating	4	1700-1550-1450	48	173/4	25	28.50	39.90
12131 12 in.	Oscillating	6	1150-1050- 900	42	1734	25	29.50	59.00
16101 16 in.	Desk or bracket	4	1600-1300-1250	86	2134	31	26.00	36.40
16111 16 in.	Desk or bracket	6	1450-1050- 950	76	2134	31	27.30	54.60
16121 16 in.	Oscillating	4	1600-1300-1250	88	20	31	32.00	44.80
'16131 16 in.		6	1450-1050- 950	81	20	31	33.50	67.00

### FOR DIRECT CURRENT-110 VOLTS

D371-1751 9 in.	Desk or bracket	4	11900-1650-1400	23	51/4	10	\$14.CO	\$19.60
D371-177 9 in.	Oscillating	1	1800-1550-1300	24	6	10	17.00	23.80
12100 12 in.	Desk or bracket	4	1650-1300- 900	36	19	25	20.75	29.04
	Desk or bracket	6	1200-1000- 800	24	19	25	22.00	30.80
12120 12 in.		4	1650-1300- 900	41	19	$\widetilde{25}$	27.00	37.80
12130 12 in.	Oscillating	6	1200-1000- 800	31	19	$\overline{25}$	19.60	39.20
	Desk or bracket	4	1500-1250-1000	69	21	31	25.00	35.00
16110 16 in.	Desk or bracket	6	1150- 950- 750	46	21	31	26.30	38.82
16120 16 in.	Oscillating	4	1450-1150- 850	74	21	31	31.00	43.40
16130 16 in.	Oscillating	6	1150- 950- 800	51	21	31	32.50	45.50

Fer 220 volts—Alternating or direct current circuits.
Fer 50 cycle—100 to 120 volt circuits.
Fer 40 cycle—100 to 120 volt circuits.
Fer 25 cycle—100 to 120 volt circuits.
Fer 30 to 35 volt direct current fans.

On application

\*Will operate satisfactory on circuits of 5% above or below rated voltage.

Fans are shipped, except for export, with blades and guards assembled and packed one in a box. Delivery F. O. B. Western Electric warehouses except those houses taking net additions as noted below:

Desk and Bracket Oscillating \*Delivery Points 9 in. | 12 in. | 16 in. 9 in. | 12 in. | 16 in. \$0.20 \$0.30 \$0.35 \$0.25 \$0.35 Houston, Tex..... \$0.40 .30 Dallas, Tex..... .25 .60 .45 .55 .55 Denver, Colo . . . .35 .65 .75 .40 .75 .85 Salt Lake City, Utah. San Francisco, Portland, Los Angeles, Seattle. .40 .75 1.20

A 50 cent freight allowance will be made on freight (not express) shipments of 500 lbs. or more at points listed.

† Prices apply only to stock on hand.

Digitized by GOOGLE





32 Inch Direct-current Ceiling Fan

56 Inch Ceiling Fan, D.C., 4 Blades

### Direct Current Ceiling Fans

The leading characteristics of the Western Electric ceiling fans are their small current consumption, quiet operation and the small amount of attention required for their maintenance.

The line of direct current ceiling fans comprise a 32 inch fan finished in white enamel or black japan, specially designed for use in hotels, cafés, offices and narrow hallways and a 56 inch fan finished in black japan. The 56 inch fans particularly recommended for use in large hotels, theaters, restaurants, offices and stores.

### For 110 Volt Circuits

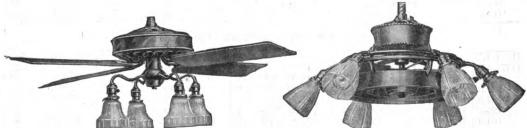
Size Sweep of Blades in Ins.	No. of Speeds	No. of Blades	Finish of Body	Approx. Speeds R.P.M.	Approx. Watts Consumption at Max. Speed	Approx. Net Wt.	Approx. Shipping Wt.	List No.	†Retail Price Complete	†List Price Complete
32 56	3	4	Black japan Black japan	450 200-150-100	60 145	25 50	40 105	673 681	\$27.00 32.25	\$37.80 43.20

†Prices on the 32 and 56 inch fans do not include stems. Stems may be furnished at an extra charge of 45 cents per foot or fraction thereof.

For voltages and frequencies other than specified above, or for electrolier attachments and special finishes, prices will be furnished on application.

Delivery F. O. B. Western Electric warehouses except those houses taking net additions as noted below.

·	Plain or	11		Plain or
	Ornamental			Ornamental
Delivery Points		Delivery Points		Ceiling Fans
Houston, Tex	\$0.75	Salt Lake City	Utah, and Butte, Mon	\$2.10
Dallas and Ft. Worth, 1ex	1.15	San Francisco	, Portland, Los Ange	les,
Denver, Colo	1.65	Seattle		<b>2</b> .75



Type C. 52 Inch Ceiling Fan With Electrolier Attachment

Type D. Deflector Ceiling Fan

### Alternating Current Ceiling Fans

The Western Electric ceiling fans for alternating current circuits offer a wide choice of fans for the solution of ceiling fan installations of all kinds.

In their construction, special attention has been given to the electrical and mechanical design, thus insur-

In their construction, special attention has been given to the electrical and mechanical design, thus insuring exceptionally high operating efficiencies, reliability and serviceability with a minimum of maintenance. The Type D deflector ceiling fan, through its compact construction, is especially adapted for use in banks, dining cars, hotel rooms, cafés, restaurants. It may be operated at five speeds.

The 52 inch Type C ceiling fan is recommended for large halls, theaters, offices, etc., and may be furnished with or without electrolier attachments in the plain finish, Type C, or in ornamental finish, Type CO.

Adjustable Blades. A distinctly novel departure in ceiling fan construction is the adjustable blade feature which has been incorporated in the 52 inch, Type C and CO fans. With the ordinary type of fan, the blades are fixed so that air is delivered downward, and the only change that can possibly be made is to reverse the blades so as to throw the air upward. This entails removing the blades entirely and replacing them in the reverse position. them in the reverse position.

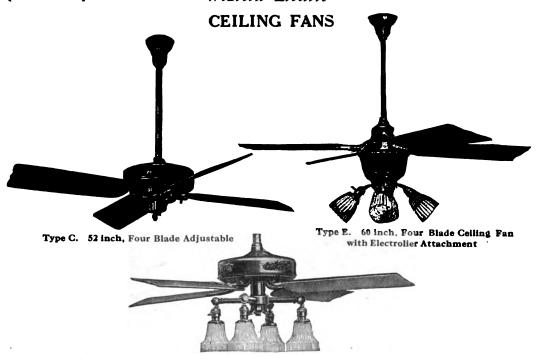
On the new, adjustable blade, Types C and CO fans, the position of the blades can be changed at will,

even when the fan is operating, so that the air can be directed downward, or upward to any degree, and by adjusting the blades so they are flat, no air will be moved.

The 60 inch Type A and Type E are particularly adapted for use in large halls, stores, restaurants, etc.

The Type A fan is furnished with adjustable blades unless equipped with electrolier attachments. The blades on the Type E fan are fixed; that is, not adjustable. Digitized by GOOGIC

For prices see next page.



Type CO. 52 inch, Four Blade Ceiling Fan with Electrolier Attachment Alternating Current Ceiling Fans

List				Size weep in	No.	No.		Max. Speeds	Watts Con-	App. Ship		List Price
No.	Туре	Cycles	Volts	Ins.		Speeds	Finish	Ŗ.P.M.				Complete
$\overline{\mathbf{D}}$	Deflector	50-140	50-125	14	4	5	Ox. copper	500-1050	125	62	\$29.00	\$52.20
106	Plain "C"	60	110	52	†4		Black japan		125	77	39.00	*70.20
521	Orn. "CO"	60	110	52	†4		Ox. copper	225	125	85	41.75	83.50
A	Plain	50 or 60	50-125	60	2 or 4	. 1	Ox. copper	175	110	68	34.00	68.00
E	Plain "E"	50 or 60	100-120	60	2 or 4	2	Black japan	$\frac{140}{175}$	110	65	31.00	62.00

For electrolier attachments, special fittings, extras, etc., prices on application.

A complete ceiling fan consists of starting switch, ceiling hook, canopy, insulated hanger and stem for 12 foot ceilings unless otherwise noted.

\*Price does not include stems unless specially ordered. ¾ inch enameled black japan or oxidized copper conduit is recommended. Prices on application.

†Above may be furnished with 2 blades for 56 inch sweep at same prices.

### Alternating Current Fans Adjustable Blade

				Size	No.	No.			Watts	Approx.	Retail	List
List				Sweep	of	of		Speeds	Con-	Šhpg.	Price	Price
No.		Cycles	Volts	in Ins.	Blades	Speeds	Finish	R.P.M.	sumed	Wt.	Complete	Comp.
130	Plain Adj. "C"	60	110	<b>52</b>	4	3	Black japan	225	125	81	<b>\$43</b> .20	<b>\$77.76</b>
138	Orn. Adj. "CO"	60	110	<b>52</b>	4	3	Black japan	225	125	89	45.95	82.71
Attachments, Extras, Etc.												

For voltages and frequencies other than specified above, prices will be furnished on application.

Prices for Types A, D or E fans include stems for 12 foot ceilings. For greater lengths, add \$3 per foot.

For 220 volt fans, add \$1.65 net.

Stem and casing will not be furnished with Type C fan, but insulated hanger, hook and canopy will be supplied. Plain % in. iron pipe threaded both ends to fit motor and hanger, finished same as fan, will be furnished at 45 cents net per foot or fraction thereof.

Type CO fan prices include solid suspensions suitable for 12 ft. ceiling. For adjustable suspension, 10 to 12 feet, add \$1.50 net.

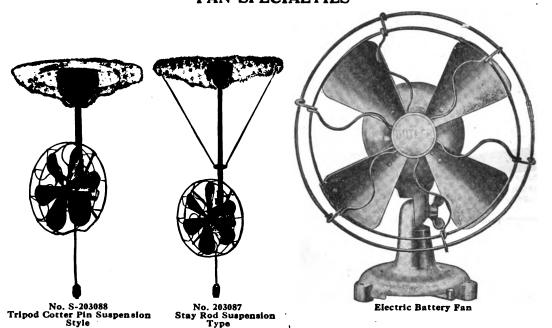
With all Types C and CO fans we can furnish special wall switches and rheostats to give seven speeds.

Prices on application.

Delivery F. O. B. Western Electric warehouses except those houses taking net additions as noted below. Delivery Points. 52 and 60 inch [] Delivery Points. 52 and 60 inch Houston, Tex. \$0.75 Salt Lake City, Utah and Butte, Mont. \$2.10 Dallas and Ft. Worth, Tex..... 1.15 San Francisco, Portland, Los Angeles, Denver, Colo..... 1.65 Seattle .....

Prices of floor or counter column fans will be furnished on request. These are not carried in stock, but will be built to specifications.

# Western Electric FAN SPECIALTIES



Telephone Operating Room Fans

These fans have been designed to meet the special requirements of telephone companies for a slow

speed, noiseless, easy running fan for use in telephone operating rooms.

These fans, which are modified types of Western Electric standard fans, are furnished in two styles, tripod cotter pin suspension type and the stay rod suspension type. Each type of fan is furnished for both direct and alternating current. The tripod cotter pin suspension type in the 16 inch size and the stay rod suspension type in the 12 inch size. Both types are furnished with 6 blade drawn steel frame fans with blade guards and screws finished in black.

Style No.	Style No.		Current		Speed	*List Price
of Fan	Suspension	Size	or Cycles	Volts	R.P.M.	Each
244824	S-203088	16 ins.	60	100-125	1050	<b>\$</b> 75.00
244825	S-203088	16 ins.	60	200-250	1050	79.00
244828	S-203088	16 ins.	D.C.	100-115	1050	77.50
244829	S-203088	16 ins.	D.C.	200-230	1050	81.00
244822	203087	12 ins.	60	100-125	1050	64.00
244823	203087	12 ins.	60	200-250	1050	67.50
244826	203087	12 ins.	D.C.	100-115	1200	65.00
244827	203087	12 ins.	D.C.	200-230	1200	68.50
List No.	4	Butler	Electric	Battery Fans		†List Price Each

371839 Butler electric battery fan with 6 ft. cord..... \$25.20 Knapp 8 Inch Battery Fan

Type B. F.
A portable model of simplicity for the home, office or sickroom.
POINTS OF CONSTRUCTION

Armature, laminated. Field, two-pole. Commutator, drawn copper segments, insulated with mica. Brushes, copper gauze, self-adjusting. Oil cups, wick feed. Base, fitted with starting switch. Finish, black japan, with brass polished fan and guard.

**BATTERY** 

This is an ideal outfit with a 6 volt storage battery. Twenty good dry cells, 6 x 2½, connected 5 in series, 4 multiples, if run three hours per day will last for 200 hours upward; more continuous work will lessen the total run.

The box for 20 dry cells is wired complete and a diagram furnished, showing how to put in the cells and connect.

Performance: Speed, 1600 R.P.M. Volts, 6. Amperes, 1.2. †List Price List Prices and Data No. Each 145 B. F. motor, 8 in. fan and guard (no cord or battery)...... \$12.00 Box for 20 cells (less cells).... 1.50 112 6 ft. connecting cord, flexible ..... 110

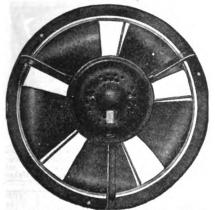
\*Delivery F. O. B. Factory, Newark, N. J. For warehouse deliveries write nearest house. †Delivery F. O. B. New York. For warehouse deliveries write nearest house.



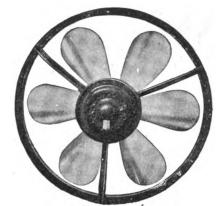
8 Inch Battery Fan

# **EXHAUST AND VENTILATING FANS**

Induction Type



Bucket Blade Exhaust Fans A.C. or D.C.



Flat Blade Ventilating Fan A.C. or D.C.

# Exhaust and Ventilating Fans

The Western Electric line of exhaust and ventilating fans has been developed through years of experience in solving ventilating problems of all kinds. Their efficient operation, with the small amount of care required, renders them particularly adapted to the installations for which they have been designed.

The 12 inch and 16 inch ventilating fans are recommended for ventilating restaurants, cafés, small moving picture theaters, halls, hotel and apartment house kitchens, etc. They are very light in weight and can be installed with small expense and without the necessity of special construction work. They have 6 flat polished brass finished blades and the frame is finished in black enamel.

The 9 inch, 12 inch and 15 inch exhaust fans are recommended for installation infactories, lofts and cellars where fresh air is essential, not only for the benefit of the occupants of the rooms, but also for the benefit of the material stored there, as in many cases, the freshness of the goods stored depends on the freshness of the surrounding air.

			1	1	Speed	Watts		ts.		1	T	
	No.	Style	Finish	Finish	R.P.M.	at	l	U3.	_	1	1	
Size	of	of	of	of	With 3 Speed	High	1 1		List	Retail	List	
Ins.	Blades	Blades	Blades	Body	Regulator	Speed	Net	Shpg.	No.	Price	Price	
Ventilating Fans—60 Cycle 110 Volt												
12	6	Flat	Brass	Black	1450-1250-1050	50	33	50	371769A	\$22.50	\$31.50	
16	6	Flat	Brass	Black	1040- 960- 860	70	40	65	371771A	25.75	36.00	
	Ventilating Fans—Direct Current, 110 Volts											
12	6	Flat	Brass	Black	1600-1320-1000	48	33	50	371787A	\$19.25	\$27.00	
16	6	Flat	Brass	Black	1150-1000- 800	54	40	65	371789A	22.00	31.00	
				Exh	aust Fans-60 C	ycle, 110	Volts				-	
9	5	Bucket	Black	Black	1500-1400-1220	40	30	45	371773A	\$21.50	1 \$30.00	
12	5	Bucket	Black	Black	1500-1370-1220	75	40 ·	66	371775A	26.75	37.50	
15	5	Bucket	Black	Black	1140-1040- 940	140	42	68	371777A	<b>39</b> .25	55.00	
Exhaust Fans—Direct Current, 110 Volts												
9	5	Bucket	Black	Black	1700-1500-1200	40	30	45	371791A	\$17.75	\$25.00	
12	5	Bucket	Black	Black	1300-1100- 900	55	40	66	371793A	<b>2</b> 2.50	31.50	
15	5	Bucket	Black	Black	1150- 985- 800	79	42	68	371795A	35.75	50.00	

For 3 speed regulator, prices on application.

For A.C. 25 cycle, prices on application. For A.C. 40 cycle, prices on application.

For 220 volt fan, prices on application.

When ordering specify exact voltage and frequency desired.

Delivery F. O. B. Western Electric warehouses except those houses taking net additions as noted below:

		Exnaust		venti.	iating
Delivery Points	9 In.	12 In.	15 In.	12 In.	16 In.
Houston, Tex.	\$0.30	<b>\$</b> 0.45	<b>\$</b> 0.60	\$0.30	\$0.35
Dallas and Ft. Worth, Tex	.45	.65	1.00	.45	. 55
Denver, Colo	.65	.90	1.50	.65	.75
Salt Lake City, Utah, and Butte, Mont	.80	1.55	2.35	750	.90
San Francisco, Portland, Los Angeles, Seattle	.90	1.70 <sup>Digi</sup>	tize $\overset{2}{2}\overset{35}{60}$	.90	1.35

# Western Electric VENTILATING OUTFITS







A.C. Exhaust Fan Outfit Polyphase Ind. Motor D.C. to Ventura Desk Fan



D.C. Exhaust Fan Outfit Constant Speed D.C. Motor D.C. to Ventura Desk Fan

#### Ventura A.C. Exhaust Fan Outfit-–Direct Connected

Diam.	Air Delivery				Ship.			Lis	t Price Outfi	it
of Fan in	in Cu. Ft. per Min.	Speed Sync.		Fan	Wt. in Lbs. Outfit	H.P.	Motor	With- out Regu-	With CR-1262 Regu-	With Verti-
Inches	(Approx.)	R.P.M.	Volts	No.	(Approx.)	(Approx.)	Frame	lator	lator	Motor
	CONST	ANT SPEE	D OUTFIT	S WITH	O CYCLE S	INGLE-PH	ASE MOT	ORS (TY	PE SA)	
1034 1212 1414 16	720 750 1115 1580	1800 1200 1200 1200	$\begin{cases} 110 \\ \text{and} \\ 220 \end{cases}$	2 2½ 2½ 3	55 60 65 90	1/30 1/30 1/30 1/15	325 325 325 137	\$86 92 100 122		\$108 114 122 144
183/4	1860	900	CDEED OF	3½	130	1/10	147	144		166
	-	ONSTANT	SPEED OU	TFITS W			MOTORS	(TYPE R)		
21 ¼ 26 ¾ 32 37 ¼	2910 4810 6890 9650	950 750 625 550	110	5 6	190 285 375 455	1/7 1/4 1/3	526 546 549	\$206 272 320	\$224 286 346	
42 <sup>3</sup> / <sub>4</sub> 48	12500 16300	475 440	220 and 220	8 9	585 750	1/2 3/4 1	564 584 588	386 572 638	426 614 480	
	(	CONSTANT	SPEED O	UTFITS V	VITH 60-CY	CLE POLY	PHASE M	IOTORS	6.	
21 ¼ 26 ¾ 32 37 ¼ 42 ¾ 48	2770 4220 6530 9900 11130 17500	900 720 600 600 450 450	$\begin{cases} 110 \\ 220 \\ 440 \\ 550 \end{cases}$	5 6 7 8 9	205 290 390 460 620 850	1/7 1/4 3/8 5/8 3/4	110 120 120 140 160 180	\$172 218 264 330 374 462		\$204 256 302 386 440 550

Single-phase outfit with Type SA motor consists in each case of 60 cycle enclosed motor, fan and tripod. Single-phase outfits with Type R motor consists in each case of 60 cycle enclosed repulsion motor, fan and tripod. The outfit may be used for constant speed work connecting the motor directly across the line. For variable speed work CR-1262 regulator as listed giving 33 per cent. speed reduction is used, air delivery varying in direct proportion to the speed. Type R motor may be operated on either 110 or 220 volt circuits by suitably interchanging the lead connections.

Constant speed outfit with three or two-phase motor consists in each case of 60 cycle motor, fan and tripod. Horizontal motor is totally enclosed. Vertical motor is open.

Ventura D.C. Exhaust Fans—Direct Connected

Diam. of	Air Delivery Cu. Ft.				Ship. Wt.	H.P.	List		List P	rices
Fan in Inches	per Min. (Approx.)	Speed R.P.M. (Approx.)	Volts	Fan No	in Lbs. Outfit (Approx.)	of Rheostat (Approx.)	No. Speed Reg.	Motor Frame	Hori- zontal	Verti- cal
10% 10% 12% 12% 12% 14%	650 650 845 845 1165	1500 1500 1290 1290 1200	115 230 115 230 115	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	65 65 70 70 70	1/40 1/40 1/40 1/40 1/30	SP-30008 SP-30009 SP-30008 SP-30008	RT-1/20 RT-1/20 RT-1/20 RT-1/20 *335	\$80 80 82 82 96	\$102 102 104 104 118
16 16 18% 18%	1165 1485 1485 2180 2180 2180	1200 1070 1070 1000 1000	230 115 230 115 230 550	23% 3 3 31% 31% 31%	70 100 100 130 130 165	1/30 1/20 1/20 1/8 1/8	SP-30009 SP-30090 59632 59607 59619 59631	*335 *335 *335 *246 *246 RT-1/4D	96 104 104 136 136 180	118 126 126 158 158 202
21 14 21 14 21 14 26 14 26 14 26 14	2910 2910 2910 4810 4810	900 900 900 750 750	115 230 550 115 230	4 4 4 5 5	200 200 200 290 290	1/8 1/8 1/7 1/7 1/7 1/4 1/4	59607 59619 59631 59608 59620	RT-1/4D RT-1/4D RT-1/4D RT-1/2D RT-1/2D	182 182 192 240 240	204 204 214 262 262
26% 32 32 37 % 37 % 37 % 42% 42% 42%	4810 6890 6890 6890 9650 9650	750 625 625 625 550 550	550 115 230 550 115 230	5 6 6 7	365 365 365 440 500	1/4 1/3 1/3 1/3 1/2 1/2	59632 59608 59620 59632 59609 59621	RT-1D RT-1/2D RT-1/2D RT-1D RT-1D RT-1D	272 258 258 304 322	294 290 290 336 354
48	9650 12500 12500 12500 16300	550 475 475 475 440	550 115 230 550 115	7 8 8 8	655 695 695 695 895	1/2 1/2 3/4 3/4 3/4	59621 59633 59610 59622 59634 59611	RT-1D RT-2D RT-2D RT-2D RT-2D RT-3D	322 392 412 412 418 484	354 424 444 444 418 518
48 48	16300 16300	440 440	230 550	9 9	895 895	1 1	59623 59635	RT-3D RT-3D	484 510	518 554

\*Type SD. The above outfits consist in each case of a series wound motor with totally enclosing covers fan, tripod and armature speed regulator, equipped, on sises 1834 and larger, with low voltage release. Regulator is capable of reducing motor speed 50 per cent. The air delivery varies in direct proportion to the speed.

Heusehold Motor Applications

24-1

# Western Electric **VENTILATING OUTFITS**



Single Phase Motor, Direct Connected to Davidson Pro-peller Fan



Polyphase Induction Motor Di-rect Connected to Davidson Propeller Fan



D.C. Motor Direct Connected to Davidson Propeller Fan

### Davidson Exhaust Fan Outfits **DIRECT CONNECTED**

Single-phase outfit consists of single-phase Type R enclosed repulsion motor, fan and tripod. The outfit may be used for constant speed work connecting the motor directly across the line. For variable speed work CR-1262 regulator as listed giving 33 per cent. speed reduction is used, air delivery varying in direct proportion to the speed.

Direct Current outfit consists in each case of a series wound motor with totally enclosing covers, fan, tripod and CR-1225 armsture speed regulator, with low voltage release, capable of reducing speed 50 per cent. The air delivery varies in direct proportion to the speed.

cent. The air delivery varies in direct proportion to the specu.

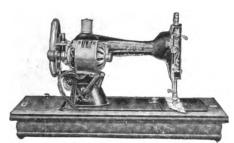
Note: The air delivery and H.P. required for Davidson fans given herewith, are based on free intake and delivery. Hence these outfits are not designed for use with any great quantity of duct work, either in the intake or outlet. Air deliveries are supplied by the fan manufacturers, but are not guaranteed by the Company. A C OUTEITS WITH SO CYCLE SINGLE DILLER MOTORS

note to	Air	A.C.	DUTFITS		O CYCLE	SINGLE	PHASE N		st Price Out	fit
Diam. of Fan in Inches	Delivery in Cu. Ft. per Min. (Approx.)	Speed Sync. R.P.M.	Volts	Ship. Wt. in Lbs. Outfit (Approx.)	H.P. (Approx.)	List No. Speed Reg.	Motor Frame	With- out Regu- lator	* With Regu- lator	With Verti- cal Motor
18 24 30 36 42	2812 4800 8436 12400 15390	925 675 600 510 400	$\left.\begin{array}{c} 110\\ \text{and}\\ 220 \end{array}\right\}$	175 255 385 570 710	1/2 1/3 1/2 1 1/2		526 546 564 588 596	\$198 268 326 550 630	\$212 294 352 580 670	::::
200			OUTFITS		60 CYCLI	E POLYP	PHASE MO	TORS		
18 24 30 36 42 48	2600 4100 8000 13000 16000 24000	900 600 600 600 450 450	$\begin{bmatrix} 110 \\ 220 \\ 440 \\ 550 \end{bmatrix}$	160 225 375 545 655 730	1 1 1 2		110 120 140 160 180 201	\$158 210 272 346 390 506		\$192 246 328 412 474
	1000		C. OUT	FITS WI		ES WOU				
18 18 18 24	2812 2812 2812 5200	925 925 925 725	115 230 550 115	190 190 190 260		59607 59619 59631 59608	RT-¼D RT-¼D RT-¼D RT-½D RT-½D		\$168 168 180 220	\$190 190 202 242
24 24 30 30	5200 5200 8436 8436	725 725 600 600	230 550 115 230	260 260 410 410	1/5	59620 59632 59609	RT-1/2D RT-1D		220 232 272 272	242 254 294 294
30 36 36	7750 12400 12400	550 510 510	550 115 230	410 550 550	1	59621 59633 59611 59623	RT-1D RT-1D RT-2D RT-2D		294 364 364	316 386 386
36 42 42 42	11650 16350 15390 14610	480 425 400 380	550 115 230 550	550 800 800 800	$ \begin{array}{c c} 1 \\ 1\frac{1}{2} \\ 1\frac{1}{2} \\ 1 \end{array} $	59635 59611 59623 59635	RT-2D RT-3D RT-3D RT-3D		380 426 426 436	402 460 460 468
48 48 48	21300 21300 21200	370 370 370	115 230 550	1100 1100 1100	2 2 .	59612 59624 59636	RT-5D RT-5D RT-5D		584 584 594	616 616 628

\*CR-1262 regulator is used with single phase outfits; CR-1225 regulator with direct current outfits. Note: Single phase motor may be operated on either 110 or 220 volt circuits by suitably interchanging Digitized by GOO the lead connections.

# Western Electric

### SEWING MACHINE







Sewing Machine

Sewing Machine enclosed in carrying

This foot control regulates perfectly. A pressure of the foot starts the motor. produces any desired speed and stops the motor.

# Portable Electric Sewing Machine

The Western Electric Sewing Machine is a combination of the standard Western Electric Sewing Machine motor and a high-grade sewing machine of national repute, the combination resulting in a compact, self-contained and easily portable electrically operated sewing machine.

The Motor. The electric motor is of the universal type, which can be operated on direct or alternating current circuits. The standard motor is designed for operation on 110 volts and will operate efficiently on alternating current frequencies of 25, 30, 40, 50 or 60 cycles. Motors can be furnished for 220 volts and for 133 cycles at a slight additional cost.

The speed of the motor is controlled by a foot rehostat, and the sewing speed can be varied from slow to fast through several intermediate speeds by a slight pressure of the operator's foot.

No. 1 Type. The present Western Electric Portable Sewing Machine is of the vibrating shuttle type, the oldest and most popular type of sewing machine on the market. The shuttle motion is the same as in the Singer sewing machine—as you know, the most extensively used sewing machine in the country. It is also the least expensive to build and was selected by us as the first one to place on the market because of that fact.

No. 2 Type Rotary Sewing Machine. The rotary sewing machine is larger than the present vibrating shuttle type, the head being the same as that used in the standard pedal type machine. The bobbin is of cylindrical shape and rotates on its own axis, using the principle of the Standard sewing machine, which was the original rotary type machine.

No. 3 Type—Low Arm Single Thread Machine. This machine is built on the principle of the Wilcox & Gibbs machine, and we are advised by the factory that the parts are practically interchangeable with that machine. The distinctive feature of this machine is that it has no bobbin, the spool on top furnishing thread for both the upper and lower parts of the stitch, which is a chain stitch and can be unraveled easily by breaking the thread at any point.

We are advised that this machine, as well as the rotary, has a greater sewing speed than the vibrating type.

### Complete With Motor and Set of Attachments

				-West of the	
List		Retail	List	Retail	List
No.		Price	Price	Price	Price
1	Vibrating Shuttle Type for 110 to 120 volts D.C. or A.C. 60, 50, 40, 30 or 25 cycle circuits. Net weight 32 lbs Gross weight 50 lbs	, ,	<b>\$46.00</b>	<b>\$</b> 37.00	\$49.00
2	Rotary Type, for 110 to 220 volts D.C. or A.C., 60, 50, 40 30 or 25 cycle circuits. Net weight 37 lbs. Gross weight 62 lbs.	t	61.00	48.50	64.50
3	Low Arm Single Thread Type, for 110 to 120 volts D.C. of A.C., 60, 50, 40, 30 or 25 cycle circuits. Net weight 29 lbs. Gross weight 45 lbs.	r )	74.50	58.50	77.50
	Extras				
	For 220 volts, A.C. or D.C., 32 volt D.C., or 133 cycle A.C. add to above prices	, 75	1.50	.75	1.50
	Cork pulley	60	.80	.60	.80
	Foot control less cord	4.00	6.00		6.00
	Rheostat only	<b>3.00</b> 0ig			4.00
Hous	ehold Motor Applications 26			0	

# Western Electric SEWING MACHINE MOTORS

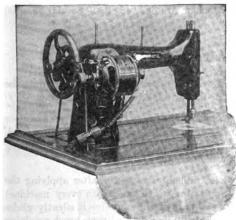


Jack Rabbit Type Sewing Machine Motor

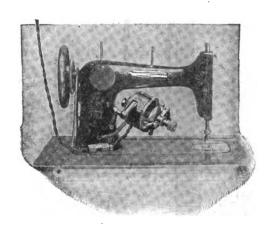


Jack Rabbit Type

Western Electric sewing machine motors, Jack Rabbit Type, fit any machine except Willcox & Gibbs automatic (or New Home automatic) machines, for which it is advisable to order the special bracket types made for these machines as mentioned below. Just slip off the belt and place the motor on your machine next the wheel. Place the little pedal on the floor. A slight pressure of your toe starts the wheel. Press a bit harder to go faster, no effort is required. Just a silent, steady motion which stops the instant your remove froot from pedal. Without extra pressure it will put the needle through several plies of heaviest fabric. You can do fancywork, quilting, etc., and all the attachments are more easily used. The cost of running is scarcely more than a small 8-candle power light. Guaranteed against electrical or mechanical defects for a period of one year.



Bracket Type Motor, Motor Attached
For Standard Rotary Machines Only
Bracket Type



Showing Motor Ready to Lower

The bracket types have been designed to attach the Western Electric motor permanently to the sewing machine in such a manner that the Western Electric motor can be swung under the head of the sewing machine so that it may be closed in the ordinary way.

Western Electric special brackets can be furnished for the following makes of sewing machines.

Singer—All types New Home—Vibrator Free—All types National—Automatic
White—Rotary New Home—Rotary King—All types Standard—Rotary
White—Vibrator New Home—Automatic National—Rotary Willcox & Gibbs—Automatic
Eldredge—Two spool

Universal Type bracket which fits all makes of sewing machines except the automatic. When ordering be careful to specify just which type and model, also name of manufacturer. \*List List No. Retail Price Each Price Sewing machine motor, Jack Rabbit Type, 110 to 120 volt, A.C. or D.C.

Sewing machine motor, Jack Rabbit Type, 220 volt, A.C. or D.C.

Special bracket type, 110 to 120 volt, A.C. or D.C.

Special bracket type, 220 volt A.C. or D.C.

Universal bracket type, 110 to 120 volt, A.C. or D.C.

Universal bracket type, 220 volt, A.C. or D.C.

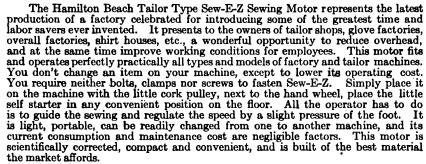
Cork nulley. 371056 \$22.00 **\$**15.00 23.50 371065 15.75371840 22.00 15.00 371841 23.50 15.7515.00 371842 371843 15.75 23.50Cork pulley. 70 Foot control with cord and plug..... 7.00 4.50 Rheostat only with cord and plug.... 5.00\*Delivery F. O. B. Factory, Racine, Wis. For warehouse deliveries write nearest house.

Sew E-Z Motor Tailor Type

# SEW E-Z MOTOR AND FLOOR POLISHER

### Sew E-Z Sewing Motor

### TAILOR TYPE



Size of Motor: Diameter, 31/8 inches; length, 51/2 inches; weight, 43/4 lbs.; length of shaft, 7-5.32 inches; size of pulley, 11/2 inches, uprights, 6 inches; lowest Motor wound for 115 volts, A.C. or D.C., 25 to 60 cycles.

Watts: 41 at lowest speed, 70 at highest.

Gives speed of 300 to 1800 stitches per minute.

Motor is reversible by simply

reversing position of pulley and bobbin.

Shaft extension outside of motor is equipped with friction attachment for winding bobbins. Retail List Price Price Weight Each Each

Tailor Type Sew-E-Z Sewing Machine Motor. 43/4 lbs. \$22.00 \$32.00



The Wax-Rite floor polisher is constructed of the best materials the market affords, and in a manner that will insure lasting satisfaction.

This device accomplishes what architects, wax manufacturers and floor finishers have tried in vain to accomplish for years—to secure a hard, smooth, wax finished surface. Forever eliminates the necessity of getting on the knees to perform this tiresome household duty.

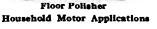
Attach to any ordinary electric light socket and after applying the wax (with the special H. B. applicator which goes with every machine) without the slightest effort on the part of the operator it silently glides over the surface to be polished and with its massive bristle brush revolving at the rate of three thousand revolutions a minute, gives floors a hard, glassy finish that would require hours of hard labor to obtain by hand. Uses less wax and gives a finish that wears ten times longer than that applied by any other method.

Dimensions. Length 10½ inches, width 7 inches, height, exclusive of handle, 8 inches. The handle is made of second growth hickory of 4 foot length and has a feed through switch, thus eliminating any possibility of short circuiting. Weight, entire machine, 21 lbs.

Motor. H. B. Air Cooled Universal, operating on either alternating or direct current at 110 volts. Equipped with a 73 8 inch first quality round bristle brush. Finish black japan.

Retail Price List Price Weight Each Finish Each Wax-Rite Floor Polisher. Black japan 21 lbs. \$35.00 \$50.00

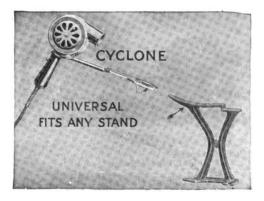
Delivery F. O. B. Factory, Racine, Wis. For warehouse deliveries Digitized by GOOGIC write nearest house.





### ELECTRIC HOUSEHOLD APPLIANCES





Hair Dryer

Shoe Dryer

### Electric Hair Dryer

The No. 1 Hair Dryer is recommended for professional use, as it throws a strong blast of air, doing the work in quicker time than the No. 2. The No. 2 Dryer is, however, generally used by professionals, especially when quick service is not essential.

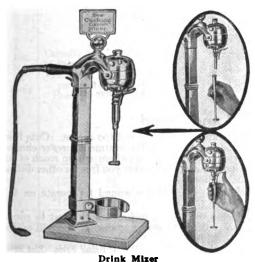
Standard voltage 110-120 volts A.C., 25 to 60 cycles, and D.C. 100-120 volts.

List		Retail Price	List Price
No.		Each	Each
370528	Electric Hair Dryer No. 1, heavy type	<b>\$25.00</b>	<b>\$36.00</b>
371057	Pedestal for No. 1	5.00	7.70
371058	Electric Hair Dryer No. 2, light type	16.50	<b>24.0</b> 0

# **Electric Shoe Dryer**

The H.B. Cyclone Shoe Dryer is portable, very light, efficient, durable and foolproof. Has a universal support which fits any stand so that one shoe can be dried while the other is being treated with polish. This machine is made of a highly polished aluminum casing enclosing a powerful little H.B. motor which drives the fan, throwing a strong blast of air which circulates around every part of the shoe. Standard voltage 110-120 volts A.C., 25 to 60 cycles, and D.C. 100-120 volts.

List		Retail Price	List Price
No.		Each	Each
370529	Electric Shoe Dryer	\$17.50	<b>\$26.00</b>



"Cyclone" Electric Drink Mixer

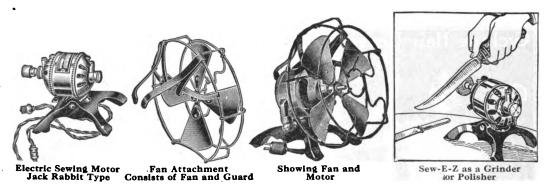
This mixer is an entirely new design that will positively mix any drink your customer calls for, and mix it far better and quicker than the most expert operator with the old time hand shake. Eggs, ice, lemons, or any ingredients ordinarily used can be prepared and the drink compounded in the usual manner. Then let the machine do the mixing instead of using the shoulder wrenching hand shaker. The No. 2 mixer is so constructed that the mixing glass and mixing blade can easily be cleaned after each individual drink, thus insuring cleanliness and positive sanitation.

List No.	Ret	ail Price Each	List Price Each
371052	No. 1 "Cyclone" Drink		
	Mixer, nickel finish	<b>\$</b> 15.50	<b>\$</b> 25.00
<b>37</b> 1053	No. 1 "Cyclone" Drink		
	Mixer, silver finish	18.50	31.00
371060	No. 2, nickel-plated detach-		
	able agitator	18.00	30.00
371061	No. 2, silver-plated detach-		
	able agitator	21.00	35.00
371062	Detachable agitators for		
	No. 2 Mixers	1.25	2.00
Sto	indeed voltage 110-120 volta	AC S	25 to 60

Standard voltage 110-120 volts A.C., 25 to 6 cycles, and D.C. 100-120 volts.

Delivery F. O. B. Factory, Racine, Wis. For warehouse deliveries write nearest house.

### **ELECTRIC HOUSEHOLD DEVICES**



# Fan, Emery Wheel and Buffing Attachments

These attachments fit any Jack Rabbit Type Sew-E-Z sewing motor. The Sew-E-Z motor when not used for sewing purposes can, with these attachments, immediately be converted into a highly efficient 8 inch electric fan motor that will give you all the enjoyment from cool breezes that you could get from the most expensive fan of its size; an efficient grinding motor that will insure sharp carving knives, or a handy buffing motor with which to polish silver.

The Fan. The blades are of steel and finished in polished nickel. To attach, remove the cork pulley and put the fan blade in its place and then a mere pressure of two springs attaches the guards.

The Emery Wheel and Buffer. The emery and buffing wheels are of the best "A" grade carborundum. Buffer, 30 ply cotton buff. Arbor for emery wheel and buffer is steel nickel plated.

	Retail Price	List Price
Description	Each	Each
Fan attachment complete (blade 7 inch)	. \$2.50 . 1.50	\$3.50 2.40





Display Stand for Steel-Kut Coffee Mill

# Steel-Kut Coffee Mill and Stand

The Steel-Kut Coffee Mill cuts coffee scientifically right—not too fine, not too coarse. Cuts it so that you get the most from its flavor when percolating or boiling. This small investment forever eliminates the flavor-destroying crushing of the bean. This device can be hung anywhere within reach of an electric light socket. A mere pressure of the switch starts its operation and leaves you free for other duties. It is substantially constructed of white brass handsomely nickelplated.

Dimensions. Height 30½ inches, width 7 inches, weight 7¾ lbs. Motor wound to operate on 115 volts, 25 to 60 cycles A.C. or 115 volts D.C.

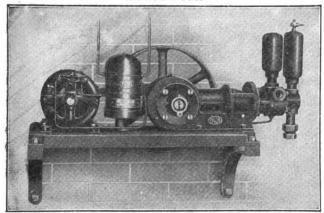
Display Stand. Is made of cast iron. Height  $3\frac{3}{4}$  inches, width  $7\frac{1}{2}$  inches, length front to rear 5 inches, weight 2 lbs. 5 oz., finish nickel plated. This stand enables the dealer to display the mill on the counter to the best advantage.

	Retail Price	List Price
Description	Each	Each
Steel-Kut coffee mill complete with cord and plug	\$16.50	<b>\$25.00</b>
Display stand for Steel-Kut coffee mill	1.50	3.00

Delivery F. O. B. Racine, Wis. For warehouse deliveries write nearest house.

### PAUL

HOUSE PUMP



Type "F" Electric House Pump

# Western Electric House Pump

The Paul Type "F" Electric House Pump has been designed especially to supersede the water motor driven pump, to positively do away with all the troubles connected therewith and to practically eliminate care and repair. Being noiseless in action, small in size, simple, strong and self-contained, it fills the requirements for residence service in the most ideal manner.

The pump bolted to the fully enclosed crank case frame is of the piston type, fully brass fitted. It is good for a suction lift of twenty-five feet. For lifts below twenty feet, no priming is required when start-

ing up dry. The lubrication is entirely automatic and of the splash system.

### **DIMENSIONS AND WEIGHT**

Space occupied, wall or floor bracket mounting, length, 30 inches; width, 10 inches; height, 23 inches. Size of suction, 34 inch; discharge, 34 inch.

Approximate shipping weight of pump with motor, 100 lbs.

### Capacity of No. 95F Pump, 150 Gallons per Hour. Rating of Motors, 1/6 to 1/4 H.P. Working Pressure, 40 and 50 Lbs.

	1	1		*List Price of Pump and Equipment					
					en Tank vice	For Pneumatic Tank Service			
	Comesita			Equipment A	Equipment B	Equipment C	Equipment D	Equipment E	
List No. of Pump	Capacity of Pump Gallons per Hour	H. P. of Motor	Electric Current	Pump with Motor, Hand Control	Pump with Motor and Automatic Electric Float Switch	Pump with Motor and Air Charging Device, Hand Control	Pump with Motor Air Charg- ing Device, Automatic Electric Controller	Pump with Motor Air Charging Device, Auto- matic Electric Controller, (52) Gal. Galvanized, Range Boiler, Tapped Special, Pressure Gauge and Relief Valve	
95 <b>F</b>	150	1/6	A.C. 1 Phase 60 Cycle 110-220	<b>\$</b> 112.10	\$145.00	\$114.56	\$127.60	\$163.86	
96F	150	1/4	Volt or D.C. 110-220 Volt	127.60	159.50	129.06	142.10	178.36	
95F	150	1/6	A.C. 1 Phase 25 and 40 Cycle 110-220 Volt or	\$130.50	\$163.50	\$132.00	\$145.50	\$183.00	
96F	150	1/4	D.C. 30-65 Volt	147.00	180.00	148.50	162.00	199.50	

Note: 1. Specify pump with Equipment A. B, C, D or E; give electric current available.

2. Pumps will be shipped with wall bracket mounting, as standard. If floor bracket mounting is wanted, specify same on order.

# Western Electric PAUL PUMPS



Fig. 803-Motor Driven

# Western Electric

# Paul Type E Pump, Motor Driven

### FOR SHALLOW WELLS

The Paul Type "E" Pump, as illustrated by Fig. 803, is especially adapted for residence service where the vertical suction lift is 20 feet or less. On account of their vertical design and very small floor space occupied, these pumps may conveniently be connected to the piping of existing systems when replacing hand pumps, water lifts or other power pumps. These pumps are also conveniently arranged with tanks, automatic electric pressure controllers and fittings assembled and mounted on cast iron bases, thus forming complete systems.

### **SPECIFICATION**

The slow speed pump of a very special, yet extremely simple design (patent applied for) is bolted to the outside of a box shaped cast iron frame, fully accessible. It is double acting, brass fitted, with high grade rubber valves on brass seats and cup leather packing. The suction pipe entering below and the discharge pipe above can be swung in any desired direction. The frame also carries a perfectly silent and efficient drive, consisting of pulleys and flat belt with a low ratio of speed reduction in connection with a set of machine cut, slow speed, spur gears. Large removable bearings bolted to the face of the frame, insuring accurate alignment carry the intermediate shaft with pulley and pinion and the crank shaft with gear. The gears are central between bearings inside the frame, thereby completely encased. Conveniently located grease cups are provided for crank pin and all bearings. The crosshead end of the connecting rod works in a bath of oil. All parts subject to wear are easily renewable.

### List Prices of Paul Type E Pumps, Motor Driven

			1	Lie	t Price of P	ump and Pa	rte
					en Tank vice		natic Tank vice
No. of Pump	Capacity of Pump Gallons per Hour	H. P. of Motor	Electric Current	Pump and Motor for Hand Control	Pump, Motor, and Automatic Electric Float Switch	Pump, Motor and Air Charging Device Hand Control	Pump, Motor Air Charging Device and Automatic Flectric Pressure Controller
90E	150	15	A. C. 1 Phase 60 Cycle 110-220 Volt		\$171.00	\$141.00	\$157.50
91E	300 150	1 2	or D.C. 110-220 Volt Motor A.C. 1 Phase 25,30,40,125,130, Cycle	214.50 150.00	256.50 186.00	220.50 156.00	243.00 172.50
91E		53	110-220 Volt Motor	240.00	282 00	246.00	274.50

### Dimensions of Paul Type E Pumps, Motor Driven

No. of Pump	Maxi- mum Pressure	Total Head	Size of	Piping	Spa	ce Occu	pied	Approx. Shipping	H.P.
•	in Lbs. perSq.In.	in Foot	Suction	Dis- charge	Length	Width	Height	Weight Lbs.	quired
90E 91E	50 50	115 115	1 in.	⅓ in. ∜ in.	18 ins. 20 ins.	12 ins. 12 ins.	39 ins. 45 ins.	210 315	133

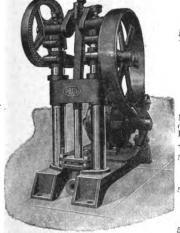
# Western Electric

# PAUL PUMPS

### TYPE H DEEP WELL PUMP

AND WATER SYSTEMS

Capacity of pump 150 gallons per hour. Maximum working pressure 50 lbs. Maximum depth to cylinder 50 feet.



Type H Deep Well Pump

			Approx. Shpg. Wt.	List Price				
No. of Pump	Drive	H.P.		Equipment A Well Cylinder for Any System with Hand Control	Equipment B Well Cyl- inder and Float Switch Controller Open Tank Systems	Equipment C Well Cylinder Air Compressor and Pressure Controller for Pneumatic Tank Systems		
50 HM	Electric motor A.C single phase, 60							
50 H M	cycles, 110-220 volt or D.C. 110-220 volt Electric motor A.C. single phase, 25-30- 40-125-133 cycle,	1/2	275	\$172.50	\$205.50	\$186.00		
50HE	110-220 volt, or D. C. 30-65 volt Gasoline engine	1/2	285 500	187.50 202.50	220.50	- 214.50 229.50		

### GENERAL DATA AND DIMENSIONS

		Up Strokes	Inside Diameter	Size of	Size of Discharge	Casing Cylinder	Size of Steel	Dime	nsions—Incl	108
No. of Pump	of Stroke	per Minute	of Well Cylinder	Drop Pipe	Pipe from Pump	and Drop Pipe Will Enter	Sucker Rod	Length	Width	Height
50HM 50HE	5 ins. 5 ins.	48 48	134 ins. 134 ins.	1½ ins. 1½ ins.	¾ in. ¾ in.	2 ins. 2 ins.	**	2814 2814	1314 1534	25½ 25½

### MOTOR AND GASOLINE ENGINE DRIVEN

Specifications: Each Paul system consists of the following equipment of sizes and capacities as listed below. (One) Paul Type H deep well pump (patent applied for) fitted with electric motor or gasoline engine as selected. (One) Paul air compressor attached to pump. (One) Paul special cylinder. (One) Paul pneumatic tank. (One) Paul automatic electric pressure controller (patent applied for) if automatic service is required. (One) each water gauge, pressure gauge, gate valve, check valve, relief valve, stop and waste cock, hose bibb, and a complete set of malleable iron fittings but no pipe.

### Motor Drive Rating 1/2 H.P.

		1			List Price of Co	omplete System	,
No.	Size	Capacity	Approxi- mate Shipping Weight of Complete	Phase 60 220 Volt, c	C. Single Cycle 110- or D.C. 110- lt Motor	With A.C Phase 25, 3 133 Cycle Volt or I 65 Volt	0, 40, 125 110-220 D.C. 30-
of	of	Tank	System	Automatic	Controller	Automatic	Controller
System	Tank	Gallons	Lbs.	Without	With	Without	With

# Capacity of Pump 150 Gallons per Hour—Maximum pressure 50 Lbs.—Maximum Depth to Cylinder 50 Feet

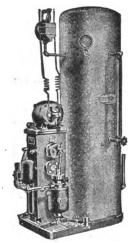
50HMA	1 24 ins. x 5 ft. 1	120	625	\$234.00	\$262.50	\$262.50 I	\$291.00
50HMB	24 ins. x 8 ft.	190	785	247.50	276.00	276.00	304.50
50HMC	30 ins. x 6 ft.	220	825	250.50	282.00	282.00	307.50
50HMD	24 ins. x 10 ft.	235	895	255.00	283.50	283.50	312.00
50HME	30 ins. x 8 ft.	295	975	264.00	292.50	292.50	321.00
50HMF	36 ins. x 6 ft.	315	985	267.00	295.50	295.50	324.00
50HMG	30 ins. x 10 ft.	365	1090	276.00	304.50	304.50	333.00
50HMH	30 ins. x 12 ft.	440	1210	l 288.00	316.50	316.50	345.00

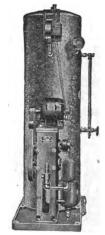
NOTE 1: Drop pipe and 3% inch steel sucker rod is not included in the above prices.

Pumps will be furnished as standard with standard discharge head. If frostproof head is wanted, specify same on order.

Delivery F. O. B. Factory, Ft. Wayne, Ind. For warehouse deliveries write nearest house.

# Western Electric Western Electric PAUL PUMPS





System 900, Side View

System 900, Front View

# Western Electric

### Complete Paul Water Systems WITH TYPE E PUMPS

The complete systems are shipped ready for connection to suction and service pipes. The motor may

be used for driving light machines when not pumping.

The Paul Hydro-pneumatic Air Charging and Priming Device (patented) is furnished with all complete systems. It is positive in its action, works to perfection and can under no circumstances unprime the pump.

The Paul Automatic Electric Pressure Controller No. 190381 adjusted 30 lbs. minimum and 50 lbs. maximum is regularly furnished with the systems; other adjustments will be furnished when ordered.

Systems 900-A and B listed below are furnished with galvanized pneumatic tanks. They are made of high grade steel with welded seams, tested at a pressure of 100 lbs. per square inch and guaranteed air tight at 75 lbs. working pressure.

Complete Paul water systems for residence service are listed below in sizes to meet average requirements

where the vertical suction lift is 20 feet or less.

Systems Nos. 900 and 901 consist of the following equipment of sizes and capacities listed below.

(One) Paul Type E Pump, (capacity as listed) fitted with electric motor.
(One) Paul (guaranteed) Hydro-pneumatic Air Charging and Priming Device (patented) attached to

One) Paul Pneumatic Galvanized or Black Tank.

(One) Paul Automatic Electric Pressure Controller, (Underwriters' Approval) set at 30-50 pounds. (One) each of water gauge, pressure gauge, checkvalve, relief valve, stop valve, foot valve and all piping between pump and tank.

SYSTEM No. 900 Power of Motor 1/4 H.P.

	Space Occ	upied	Approximate Shipping Weight
Floo	or Space	Height	of Complete System, Lbs.
900-A	<sup>20</sup> x 32 ins.	5 ft. 5 ins.	450
900-B	24 x 36 ins.	5 ft. 5 ins.	510
900-C	26 x 38 ins.	5 ft. 5 ins.	720
		SYSTEM No. 901	
		Power Motor ½ H.P.	
901-A	• $26 \times 40 \text{ ins.}$	6 ft. 6 ins.	790
901-B	32 x 48 ins.	6 ft. 6 ins.	940
		SYSTEM No. 900	

Capacity of Pump 150 Gallons per Hour-Working Pressure 50 Pounds

Tin	a amachamune:	Total Consider	List Price of Complete System			
List No. of System	Size of Tank	Total Capacity of Tank in Gallons	With A.C. 1 Phase 60 Cycle 110-220 or D.C. 110-220 Volt Motor	With A.C. 1 Phase, 25, 40, 125, 133 Cycle, 110-220 Volt Motor		
900-A	18 ins. x 5 ft. 22 ins. x 5 ft. 24 ins. x 5 ft.	Galvan. 66 Galvan. 100 Galvan. 120	\$198.00 225.00 247.50	\$213.00 240.00 262.50		
OUT THE TOTAL OF THE	ev.	STEM No. 901		- 1/ 11		

337.50

363.00

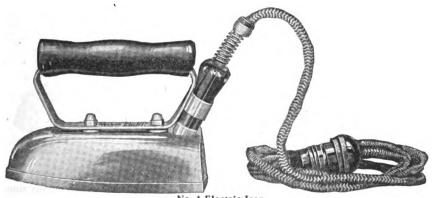
Capacity of Pump 300 Gallons per Hour-Working Pressure 50 Pounds \$327.00 24 ins. x 6 ft. 140 \$352.50

30 ins. x 6 ft.

220 Note: Systems Nos. 900-A, 900-B, 900-C, 901-A and 901-B are furnished with galvanized tanks Delivery F. O. B. Factory, Fort Wayne, Ind. For warehouse deliveries write nearest house.

901-B.

### **ELECTRIC IRONS**



No. 1 Electric Iron

### Western Electric No. 1 Iron

The Western Electric No. 1 Iron has round German silver non-corroding removable contacts. The heating element is wound with chromium nickel ribbon designed so that heat will be distributed where it will be most effective. The cord is most attractive. Color black and white. The fine copper conductors are stranded, not braided; this adds strength to the cord. Non-kink spring protects the cord at the iron. The handle support is made of one piece of metal, held by two hexagon cap nuts. The handle is of wood, shaped to fit the hand. Finished black Bolt runs clear through the handle, holding it tight. The base is machine milled and polished. The pressure plate is machine milled. It holds the elements tight against the bottom of the iron. The plug is composition, liberal in size. End shaped to fit the fingers; contacts are of phosphor bronze. This iron is made in one size only, 6½ lbs. Each iron is packed in a separate box, six in a standard package.

Retail Price List Price List No.

Carton Std. Pkg. Weight Each



"American Beauty" Iron



"Little Beauty" Iron

"American Beauty" Iron

This iron represents the highest art of making electric flat irons. It is not only a beautiful looking iron, finished in polished nickel, but has every refinement. It is suitable for all around household or laundry work. The service which it gives the user is in every way as perfect as can be given. Sufficient heat is generated and concentrated evenly on the ironing surface without wasteful loss from the top and sides.

This "American Beauty" iron can be furnished on special order with what is called "Morocco" ironing the content of the con

This "American Beauty" iron can be furnished on special order with what is called "Morocco" ironing surface at \$10.50 each. The edges and point of the iron are beveled and rounded. This iron is furnished complete with stand, cord, suspension spring, and cord having detachable plug and lamp socket attachment

Guarantee—The heating element is guaranteed for all time. Should it prove defective at any time, a new one will be given by the dealer or by us.

List Case Wt. Retail Price List Price (1/2 Doz.) Each No. Wt. Length Width Watte Wt. Each 81/4 lbs. 6½ lbs. \$7.70  $6\frac{1}{2}$  ins. 3¾ ins 525 53 lbs **\$**5.00 Always specify voltage when ordering. Voltage ranges are: 95-104, 105-114, 115-125, 190-209, 210-229, 230-250.

"Little Beauty" Iron

This little electric iron is perfect for light ironing such as handkerchiefs and laces, and because of its light weight it is most attractive to travelers. Another useful feature of the "Little Beauty" is that curling iron tongs can be slipped into the stand, which comes with every iron, and be heated quickly without fire, soot, odor or danger. It is furnished complete with stand, cord suspension spring, and cord having detachable composition plug and lamp socket.

3-B 51% ins. 31% ins. 350 3 lbs. 5 lbs. 31½ lbs. \$5.50 \$7.70 Always specify voltage when ordering. Voltage ranges are: 95-104, 105-114, 115-125, 190-209, 210-229, 230-250.

For devices to operate on voltages other than listed add 70 cents to list. OOGIC

# "AMERICAN BEAUTY" ELECTRIC IRONS



Title Heat Hou

### Rite-Heat Irons

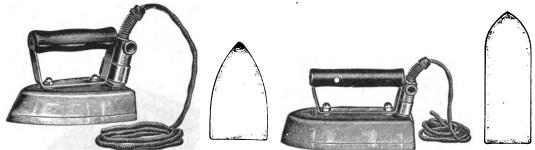
Guarantee: The heating element is guaranteed forever. If it proves defective at any time, a new one will be given by the dealer or by us.

Li <b>st</b> No.	Length	Width	Watts	Net Wt.	Shpg. Wt.	Case	Case Wt.	Retail Price Each	List Price Each
3-RH 6-RH	$5\frac{7}{8}$ ins. $6\frac{1}{2}$ ins.	$3\frac{1}{8}$ ins. $3\frac{3}{4}$ ins.	350 525	3 lbs. 6 lbs.	4½ lbs. 7¼ lbs.	12 6	56 lbs. 45 lbs.	\$4.50 5.00	\$6.30 7.00

Voltage ranges 95-109, 110-125, 190-219, 220-250.

The 6-RH iron can also be furnished for 30 volts or 60 volts.

Furnished complete with stand and cord having detachable composition and lamp socket attachment plug.



9 lb. "American Beauty" Pressing Iron

Length 7% inches Width 4% Inches

12 and 16 lb. "American Beauty" Pressing Iron

Length 9½ Inches Width 3½ Inches 16-B Length 9½ Inches Width 3½ Inches

# 9-lb. "American Beauty" Pressing Iron

The 9-lb. iron above shown is particularly adapted for heavy laundry work and is used in hotel laundries and professional laundries where more heat is required than in ordinary ironing. Furnished complete with stand and six-foot cord having detachable metal-sheathed plug.

Lis No		Width	Watts	Net Wt.	Shpg. Wt.	Retail Price Each	List Price Each
9-B	7 1 ins.	41/4 ins.	675	9 lbs.	11¼ lbs	<b>\$</b> 9.00	\$12.60
	Always specify voltage	e when ordering.	Volta	ge ranges 95-104, 10	)5-114. 115-12 <b>5</b> .	190-229.	230-250.

# 12 and 16-lb. "American Beauty" Pressing Irons

These irons are adapted for light pressing of all kinds, such as coat work or ladies' tailor work. They are not suitable for very heavy pressing. The heavier irons are designed for that purpose.

These two irons are alike except in weight. Furnished complete with stand and six-foot cord having detachable metal-sheathed plug.

List No.	Length	Width	Watts	Net Wt.	Shpg.] Wt.	Retail Price Each	List Price Each
12-B	95% ins.	3 % ins.	650	12 lbs.	16 lbs.	\$14.50	\$20.30
16-B	95% ins.	3 % ins.	650	16 lbs	20 lbs.	15.50	21 70

Always specify voltage when ordering. Voltage ranges 95-104, 105-114, 115-125, 190-229, 230-250.

For devices to operate on voltages other than listed add 70 cents to list. Og 10

# "AMERICAN BEAUTY" PRESSING IRONS



16 and 20 lb. "American Beauty"
Pressing Irons



16-VB Length 81/4 Inches, Width 51/4 Inches 20-VB Length 81/4 Inches, Width 51/4 Inches

# 16 and 20-lb. Pressing Irons

These irons, sometimes called "pant" irons, are large "V" shaped irons, made to give off volume of heat and are adapted for heavy work of all kinds. Their shape is preferred by some because they are wide at the heel and not so long. These two irons are the same size but different weights. Furnished with stand and six-foot cord having detachable metal-sheathed plug, but no lamp socket plug, as these irons should not be attached to lamp socket. Made in following voltage ranges: 95-104, 105-114, 115-125, 190-209, 210-229, 230-250.

List No.	Length	Width	Watts	Net Wt.	Shpg. Wt.	Price Each	Price Each
16-VB	8½ ins.	55% ins.	1100	16 lbs	. 25 lbs.	\$17.50	\$25.50
20-VB	8½ ins.	55% ins.	1100	20 lbs.	28 lbs.	19.00	26.60

Always specify voltage when ordering.



20 and 24 lb. "American Beauty"
Pressing Iron



20-B Length II Inches, Width 33/ Inches 20-HB Same as 20-B 24-HB Same as 20-B

# 20 and 24-lb. Pressing Irons

The 20-B is our most popular pressing iron because it is of the proper size and weight for general all around work of tailors.

The 20-HB is the same size and weight as the 20-B. The only difference is that it is arranged to give off a larger volume of heat, thus being adapted especially for manufacturers.

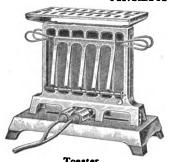
The 24-HB is the very heavy pressing iron and is especially adapted for use by manufacturers on very heavy work. Furnished with stand and six-foot cord having detachable metal sheathed plug, but no lamp socket plug, as these irons should not be attached to lamp socket. Made in following voltage ranges: 95-104, 105-114, 115-125, 190-209, 210-229, 230-250.

List No.	Length	Width	Watts	Net Wt.	Shpg. Wt.	Retail Price Each	List Price Each
20-B	11 ins.	3¾ ins.	750	20 lbs.	25 lbs.	\$17.00	\$23.80
20-HB 24-HB	11 ins. 11 ins.	3¾ ins. 3¾ ins.	1000 1000	20 lbs. 24 lbs.	25 lbs. 30 lbs.	17.50 19.50	24.50 27.30

Always specify voltage when ordering.

For devices to operate on voltages other than listed add 70 cents to list.

# "AMERICAN BEAUTY" UTENSILS





Western Electric

"American Beauty" Toaster

With this toaster two slices of bread at a time can be made into crisp, fresh, delicious toast right at the dining or tea table, where the toast can be served, buttered and eaten while crisp, fresh and piping hot.

Made in following voltage ranges: 95-104, 105-114, 115-125, 190-209, 210-229, 230-250. Low Voltages—On special order, the toaster can be supplied in voltages of 30 and 60 at no extra charge.

There will be an extra charge for toasters in other voltages.

Furnished with six-foot cord having detachable porcelain plug and lamp socket attachment plug. Guarantee: The life of this Toaster is guaranteed for two years. With ordinary care it will last indefinitely.

Retail List Shpg. Net Case Wt. Price Price No. Width Wt. Length Height Watta Wt. (2 Doz.) Each Each 5825 8 ins. 4 ins. 7 ins. 440 1½ lbs. 60 lbs. \$5.00 \$7.00 21/2 lbs. Always specify voltage when ordering.



Toaster Stove



Disc Stove Parts

Triangle Lektrik Toaster Stove

With this Toaster Stove of many uses a meal can be prepared right at the dining table. The heating coils are placed as shown in the above illustration, so as to make it easy and convenient to make two slices of toast at a time, one above and one below the heating coils. Or a slice of toast can be made below the heating coils and at the same time a flat bottomed utensil can be placed on top of the Toaster Stove, in which can be made tea, coffee, breakfast food, etc., or eggs may be fried in a skillet placed on the top of the Toaster Stove.

Comes complete with cord and plug, and can be attached to any ordinary lamp socket.

The electrical terminals on which the cord is attached to the Toaster Stove are protected by a steel plate, thus preventing the possibility of any liquid being spilled which will affect the electric connection at the Toaster Stove. Retail

List Price List Price Net Wt. No. Watts Voltage Ranges Diam. Weight of 12 Each Each 550 95-109, 110-125, 190-219, 220-250.. 6 ins. 3320 11/4 lbs. 25 lbs. 13/4 lbs. \$3.85 **\$5.40** Always specify voltage when ordering.

# **Electric Combination Disc Stove**

"5-in-1"

There are five distinct classes of household service that this device will give, any one of which can be varied in many ways. You can use the Skillet No. 1 to fry, the Toaster No. 2 to toast, the Griddle No. 3 for pancakes, the Pot No. 4 to stew and the Disc Stove No. 5 has a variety of cooking functions.

It has three heat regulations—low, medium and high.

As listed below, it comes complete with all utensils, all ready for use by attachment to an ordinary electric lamp socket.

Made in following voltage ranges: 95-104, 105-114, 115-125, 190-209, 210-229, 230-250. Furnished with six-foot triple conductor cord (for series multiple three heat connection) having detachable porcelain plugs and lamp socket attachment plug.

					Retail	List
List		Max.	Net	Shpg.	Price	Price
No.	Diameter	Watts	Wt.	Wi	Each	Each
3310	6 ins.	600	8¼ lbs.	93/4 lbs.	\$15.00	\$21.00

For devices to operate on voltages other than listed add 70 cents to list

# "AMERICAN BEAUTY" UTENSILS







Coffee Urn



Tea Samovar

## Electric Hot Water Urns

These electric Hot Water Urns are especially adapted for use in bars, hotels, drug stores, restaurants, etc. They are finished in polished nickel. Three heat regulations, low, medium and full. The one-gallon urn, 4315, can be attached to any ordinary lamp socket. All other sizes must have wire circuit run to them.

List	•	Time to		Max.	Capacity	Shipping	Retail Price	List Price
No.		Boil	Heat	Watts	Ġals.	Weight	Each	Each
4315	Hot water urn	45 minutes	3	600	1	<b>30</b> lbs.	<b>\$</b> 25.00	<b>\$3</b> 5.00
4320	Hot water urn	50 minutes	3	800	<b>2</b>	35 lbs.	30.00	42.00
4325	Hot water urn	1 hour	3	1200	3	40 lbs.	40.00	<b>56.00</b>
4330	Hot water urn	1 hour	3	2000	<b>5</b> .	70 lbs.	50.00	70.00
		*.* .* *		•, •				

No. 4315 furnished with three heat indicating snap switch, and six foot cord having detachable composition plug and lamp socket attachment plug. All others furnished with three heat indicating snap switch and terminal connection. Made in following voltage ranges: 95-104, 105-114, 115-125, 190-209, 210-229. 230-250.

# Electric Coffee Urns

List			Max.	Capacity	Shipping	Retail Price	List Price
No.		Heat	Watts	Gals.	Weight	Each	, Each
4420	Coffee urn	3	1400	3	Approx. 85 lbs.	<b>\$</b> 75.00	\$105.00
4430	Coffee urn	3	2000	4	Approx. 95 lbs.	80.00	112.00
4440	Coffee urn	3	<b>3</b> 200	6	Approx. 108 lbs.	100.00	140.00
	Coffee urn		4200	10	Approx. 120 lbs.	115.00	161.00

Furnished with three heat indicating snap switch and terminal connection. Made in following voltage ranges: 95-104, 105-114, 115-125, 190-209, 210-229, 230-250.

### Tea Samovar

List			Net	Shpg.	Retail Price	List Price
No.	Watts	Capacity	Wt.	Wt.	Each	Each
2306	450	6 cups	$4\frac{1}{2}$ lbs.	11 lbs.	<b>\$18.50</b>	\$25.90
Δìπο	ve enonify volte	go when ordering				



Tea Kettle



Chafing Dish

			iea Nettie			
List	Shpg.	Shpg. Wt.,			Retail Price	List Price
No.	Wt.	(1/2 Doz.)	Watts	Capacity	Each	Each
5415	4½ lbs.	40 lbs.	500	1 quart	<b>\$</b> 15.00	\$21.00
	"Ameri	can Beau	ty" Electric	Chafing	g Dish	
List			Max.	Shpg	Retail Price	List Price
No.	Capacity	Heat	Watts	Wt.	Each	Each
355	3 pints	3	600	$7\frac{3}{4}$ lbs.	<b>\$</b> 15.00	<b>\$</b> 21.00
	Made in the following vo	ltage ranges: 05	L-104 105-114 115-	125 190-209	210-229, 230-250,	

Furnished complete with six foot triple conductor cord (for series multiple three heat plug connection), having detachable porcelain plugs and lamp socket attachment plug.

### "AMERICAN BEAUTY" UTENSILS







### Disc Stove

This heater or stove is adapted for cooking anything that can be contained in a flat bottomed vessel. It is compact in design, consisting of a circular disc supported by a metal frame. It is finished in polished nickel. The legs of the stand are heat insulated. It is furnished complete ready for attachment to lamp socket.

List			Heat	Net	Shpg.	Shpg. Wt.	· Retail Price	List Price
No.	Watts	Diam.	Reg.	Wt.	Wt.	(½ Doz.)	Each	Each
3210	450	4 ins.	1	2 lbs.	2⅓ lbe.	20 lbs.	<b>\$</b> 5.50	\$7.70
3221	550	5 ins.	1	2¾ lbs.	$3\frac{1}{4}$ lbs.	20 lbs.	6.00	8.40
<b>323</b> 1	● 600	6 ins.	1	$3\frac{1}{2}$ lbs.	4½ lbs.	20 lbs.	7.00	9.80
T	N 2. 1 24		1 1					3/ 1

Furnished with six foot cord having detachable porcelain plug and lamp socket attachment plug. Made in following ranges: 95-104, 105-114, 115-125, 190-209, 210-229, 230-250.

### "Rite-Heat" Glower Stove

An ideal toaster stove. Two slices of toast can be made at one time or bread can be toasted under the heating coils while at the same time the top can be utilized for cooking. A sliding reflector plate is furnished which can be used either as a plate for reflecting the heat upwards or a receptacle for toast. This stove has a square top. The casing is made entirely of sheet steel nickel plated and polished.

List	_		-	•	Retail Price	List Price
No.	Watts	Size	Weight	Shpg. Wgt.	Each	Each
3350	500	Top, 5 ins. sq.; height, $3\frac{5}{8}$ ins.	1¼ lbs.	Shpg. Wgt. { Single, 2 lbs. { Case of 12, 23½ lbs.	. \$3.50	\$4.90
		the following penger 05 100 110	195 100	210 220 250	. \$0.00	<b>W1.50</b>

Made in the following ranges, 95–109, 110–125, 190–219, 220–250. Furnished complete with 6 ft. cord with detachable porcelain plugs and lamp socket attachment plug.



Triangle Electric Baby Food Warmer



"Triangle Electric" Baby Food Warmer
This device is primarily designed for heating infants' food, particularly at night, when it may be placed alongside of the bed, attached to the circuit by means of a long cord furnished with it. The cord is equipped with push button switch. It is useful also for heating water for shaving, etc. The vessel is covered with a heavy coating of vitreous gray enamel, which makes it very attractive but sanitary to use Shpg. Wgt. Retail Price List List Price

Shpg. Wgt. (1 Doz.) Each No. Watte Capacity Each Each 2510 1 pint 21/2 lbs. 28 lbs. \$3.50 \$4.90 20 Made only in 100-125 volts.

Furnished complete with 10 foot cord having special feed through standard switch and socket attachment plug. Nos. 5205 and 5215 Water Heaters

These heaters are for boiling small quantities of liquids. In the one pint size, water can be boiled in about five minutes. In the one quart size, in about seven minutes. They are made of spun copper and are finished in polished nickel. They come complete with cord ready for attaching to lamp socket.

List	-	•	Net	Shpg.	Shpg. Wt.	RetailPrice	List Price
No.	Watts	Capacity	WŁ	Wt.	(1 Doz.)	Each	Each
5205	300	1 pint	1 3/4 lbs.	21/2 lbs.	40 lbs.	<b>\$</b> 6.50	<b>\$</b> 9.1 <b>0</b>
5215	500	1 quart	3 lbs.	3 lbs.	65 lbs.	7.50	10.50

Always specify voltage when ordering. These devices can be secured for either 30 or 60 volt circuits at no extra charge.

Furnished with 6 foot cord having detachable porcelain plug and lamp socket attachment plug. Made in following ranges: 30, 60, 95-104, 105-114, 115-125, 190-209, 210-229, 230-250.

For devices to operate on voltages other than listed add 70 cents to list. Oglo Electrical Heating Devices

# "AMERICAN BEAUTY" HEATING DEVICES





List No. 111





### Western Electric

# "American Beauty" Warming Pad

This device fulfills the function of a hot water bottle. It is rectangular in shape, 12 x 13 inches, and is thin, soft, pliable and flexible. A double-working automatic thermostatic protective device is supplied with each Warming Pad for safety's sake.

						Retail	List
List		•	Heat	Net	Shpg.	Price	Price
No.	Watts	Size	Reg.	Wt.	Shpg. Wt.	Each	Each
1815	60	12 x 13 ins.	3	15 oz.	$2\frac{1}{4}$ lbs.	<b>\$</b> 8.2 <b>5</b>	<b>\$</b> 11. <b>6</b> 0

Eider-down cover is usually furnished.

Voltage ranges 95-125 and 190-250.

Furnished with ten-foot cord having three heat switch and lamp socket attachment plug.

### No. 112 CURLING IRON HEATER

This heater is intended for use in the dressing-room, boudoir or elsewhere. It is an odd design, neat in appearance.

List		Diameter	Shpg.	Retail Price	List Price
No.	Watts	Opening	Wt.	Each	Each
112	90	, 26 in.	3¾ lbs.	\$6.00	<b>\$8.40</b>

### No. 111 CURLING IRON HEATER

It is a neat plain heater for use in the dressing-room, boudoir or elsewhere. The device is finished in aickel, highly polished, and is provided with a marbleized slate base.

List	Watts	Diameter	Shpg.	Retail Price	List Price
No.		Opening	Wt.	Each	Each
111	90	n.	2½ lbs.	\$4.00	\$5.60

### TRIANGLE LEKTRIK CURLING IRON HEATER

Made of sheet steel, finished in polished nickel, light in weight, curling tongs to any size, shape or weight. Small curling irons are merely laid on top of the heater and quickly, heated.

601 85 100-125 volts only  $7\frac{1}{4} \times 2\frac{1}{4} \times 2$  ins.  $\frac{3}{4}$  lb. \$2.50 \$3.50

Always specify voltage when ordering.

Furnished with six-foot cord permanently connected to heater and lamp socket attachment plug.

For devices to operate on voltages other than listed add 70 cents to list, TOOO

# "AMERICAN BEAUTY" LUMINOUS HEATERS

### Luminous Radiators



Three Lamp Type

### PORTABLE LUMINOUS RADIATORS

These portable luminous radiators are of most attractive design and finish. The standard finish of these heaters is brushed brass, but polished brass, polished nickel or oxidized copper finish can be furnished at same price. The price of lamps is not included. For price of lamps see listing elsewhere.

		•	Three Lamp Type		Retail	List Price
List				Shpg.	Price	(Without
No.	Height	Width	Depth	Wt.	Each	Lamps)
6020	19 ins.	18 ins.	7½ ins.	37 lbs.	\$15.00	\$21.00
Alwa	sys specify voltag	ge when ordering.	,			-



Wall Type



Round Type

#### WALL TYPE

The Wall Type Luminous Radiator is to be permanently installed in the wall. It has copper reflector behind the lamps and air jacket between the copper reflector and the steel shell which fits into the wall. This air jacket acts as a heat insulation. Thus any fire risk is reduced absolutely to the minimum.

We can furnish this type in two designs of front plate. The one not shown is a perfectly plain design. The standard finish is nickel. Special finishes can be supplied at extra cost.

List No.	Height	Width	Depth	Net Wt.	Shpg. Wt.	Retail Price Each	List Price (Without Lamps)
6235	1634 ins.	16 % ins.	$5\frac{1}{4}$ ins.	28 lbs.	70 lbs.	\$35.00	\$49.00

### ROUND TYPE

This Round Type Luminous Radiator is another form of the portable type shown above. It is desirable in cases where it is required that the heat be thrown evenly in all directions.

List		Diameter	Shpg.	Price	(Without
No.	Height	over all	Wt.	Each	Lamps)
6125	20 ins.	13 ins.	36¾ lbs.	<b>\$</b> 17.50	<b>\$24</b> .50
A 1					

Always specify voltage when ordering.

Nos. 6125 and 6020 furnished with six-foot cord having detachable composition plug; no lamp socket plug.

No. 6235 furnished with terminal connection.

For devices to operate on voltages other than listed add 70 cents to list.

### ADJUSTABLE AIR HEATERS



Nos. 4712, 4722, 4730

For wall, use adjustment made by loosening lock nut at side



Nos. 4712, 4730
Adjusted for installation on floor

# Adjustable Air Heaters

These heaters are a recent development in electric heating devices, designed to meet the demand with a low priced article of high quality. They are adjustable for use either as a wall heater or portable heater. This heater is furnished in several sizes. The deflector throws the heat out into the room.

As these heaters are very compact, they are especially desirable for use aboard ships, in state rooms and other places where space is limited; but they are equally desirable for general use in homes, offices or factories.

These heaters are practically indestructible as they are made with malleable iron castings, perforated steel casings and internal supports of cold rolled steel. The heating elements are not of the open coil type, but are sheathed and properly supported and built according to Underwriters' requirements.

All elements are interchangeable and renewable and made for 250 watts each. Enough of these elements are installed in a heater to make the required or rated wattage. These heaters are complete as specified, are finished in black japan, made for one heat only and arranged with terminals for direct connections of wires.

No cords or plugs are supplied. Furnished with terminal connection. Made for standard voltage ranges. 95-104, 105-114, 115-125, 190-209, 210-229, 230-250.



Nos. 4735 and 4755
Double Adjustable Air Heater with deflector

All heaters have adjustable legs as shown in the illustrations, so that the heater can be readily screwed to the wall, the floor, or set on the floor.

The deflector plate prevents the heat from striking through on to the supporting wall and has a tendency to throw the heat outward into the space to be heated. The shipping weights of the above heaters range from 5 to 12 pounds each more than the net weights of the heaters themselves.

List No.		Height	Length	Width	Net Weight	Shpg. Wt.	Retail Price Each	List Price
4712	750 watt, with deflector	$12\frac{3}{4}$ ins.	153/4 ins.	$5\frac{1}{2}$ ins.	83/4 lbs.	13½ lbs.	<b>\$</b> 11.50	\$16.10
4722	1000 watt, with deflector	$12\frac{3}{4}$ ins.	$15\frac{3}{4}$ ins.	$5\frac{1}{2}$ ins.	9 lbs.	$13\frac{3}{4}$ lbs.	12.00	16.80
4730	1500 watt, with deflector	$15\frac{1}{4}$ ins.	$15\frac{3}{4}$ ins.	$5\frac{1}{2}$ ins.	11¼ lbs.	17¼ lbs.	14.50	20.30
4735	2000 watt, with deflector	12¾ ins.	29 ins.	$5\frac{1}{2}$ ins.	16 lbs.	23¾ lbs.	20.00	<b>28.00</b>
4755	3000 watt, with deflector	151/4 ins.	29 ins.	5½ ins.	19¼ lbs.	30½ lbs.	25.00	35.00

For devices to operate on voltages other than listed add 70 cents to list 1000

## "AMERICAN BEAUTY" AIR HEATERS







Plug No. 805



Portable Type

### Electric Air Heaters

These Air Heaters embody many new features in design and construction. They are practically indestructible. The voltage of the heater determines its size. In estimating the size heater required, it is a general rule to figure about two or three watts per cubic foot of air space to be heated. But much depends on the construction of the room or building.

Each heater is equipped with indicating snap switch and terminal box. Detachable plug and cord can be supplied at extra cost, or line wires can be attached to heater at terminal box.

List No.	Heats	Watts	Height	Length	Width	Net Wgt.	Shpg. Wgt.	Retail Price	List Price
4512	1	1000	18 ins.	$20\frac{1}{2}$ ins.	8½ ins.	20 lbs.	Approx. 30 lbs.	\$16.00	\$22.40
4530	3	1500	19 ins.	24½ ins.	8½ ins.	28 lbs.	Approx. 48 lbs.	21.00	29.40
4535	3	2000	19 ins.	24½ ins.	8½ ins.	28 lbs.	Approx. 48 lbs.	<b>24</b> . <b>50</b>	33.60
4545	3	2500	19 ins.	24½ ins.	8½ ins.	28 lbs.	Approx. 48 lbs.	27.00	37.80
4555	3	3000	19 ins.	32½ ins.	10½ ins.	53 lbs.	Approx. 70 lbs.	33.50	46.90
4560	3	4000	19 ins.	32½ ins.	10½ ins.	53 lbs.	Approx. 70 lbs.	37.00	51.80

The above heaters—Nos. 4530 to 4560, inclusive—can be supplied with single heat, instead of 3 heat regulation, but only on special order. And when so supplied they will not be equipped with indicating snap switch. The cost of such single heat heaters is approximately \$3.20 less, each, than the 3 heat heaters listed above.

Made in following voltage ranges: 95-104, 105-114, 115-125, 190-209, 210-229, 230-250.

No. 4512 furnished with single heat snap switch and terminal connection. No. 806 plug can be used with this terminal connection. All others furnished with three heat snap switch and terminal connection. No. 805 plug can be used with this terminal connection.

### DETACHABLE PLUGS

The No. 806 Plug is for use with the Heater No. 4512. The No. 805 Plug is for use with the Heaters Nos. 530 to 4560.

21001	000 10 1000	List
List No.		Price Each
806	Detachable Plugs	\$0.70
805	Detachable Plugs	2.46

### SPECIAL APPROVED HEATER CORD

List. No.	Size	Conductors	List Price per Foot
857	No. 8	2	<b>\$0.</b> 84
854	No. 12	2	.34

For devices to operate on voltages other than listed add 70 cents to list,

# "AMERICAN BEAUTY" INDUSTRIAL DEVICES







Glue Pot

## Industrial Type Disc Heater

This type disc stove is suitable for use in laboratories, for industrial purposes, or for heavy work in the household or kitchen.

List	Max.		Net	Shpg.	Retail Price	List Price
No.	Watts	Diameter	Wt.	Wt.	Each	Each
3240	1000	8 ins.	15 lbs.	20 lbs.	\$14.50	\$20.30
3245	1400	10 ins.	19½ lbs.	29 lbs.	18.00	25.20
3250	1800	12 ins.	23 lbs.	32 lbs.	22.00	30.80

Plug and cord not included in prices. See cords Nos. 852 and 854 and plug No. 806.

Made in following voltage ranges: 95-104, 105-114, 115-125, 190-209, 230-250. Furnished with three heat indicating snap switch and terminal connection. Plug No. 806 can be used with this terminal connection.

### "American" Electric Glue Pot

This is a most efficient article for use in a wood working establishment, paper box factory or in any place where glue is used. These glue pots are built with a water jacket, the glue being heated by the hot water. The heating element is attached directly to the water vessel. The outer casings completely enclose and protect the element.

All pots are arranged with three-heat regulation, the minimum heat is sufficient to keep the glue at the right consistency.

List	Max.		Net	Shpg.	Retail Price	List Price
No.	Watts	Capacity	. Wt.	₩ŧ.	Each	Each
181	500	1 quart	••••	18 lbs.	<b>\$</b> 16.50	\$23.10
182	650	2 quarts		25 lbs.	<b>18.50</b>	25.90
184	1000	4 quarts		50 lbs.	28.00	39.20

Furnished with six foot cord and No. 812 three heat porcelain switch for series multiple connection.



Electric Radiant Radiator,

# "American Beauty" Electric Radiant Radiator

The heating element consists of two rows of small cone-shaped buttons of resistance wire. In appear-The heating element consists of two rows of small concentrated buttons of resistance where. In appearance they resemble the end of the new cigar lighter, and when the current is on they get red hot and are reflected in the sides of the case so that it looks like a bed of coals. Each radiator has a handle so that it can be carried around easily and is supplied complete with eight feet brown silk cord having detachable composition plug and lamp socket attachment plug. The legs are removable, and each radiator is packed separately in a fiber box. Can be supplied in any of voltage ranges as follows, 95-104 volts, 105-120 volts, 190-209 volts and 210-240 volts, but no other voltage ranges. The list price for all these ranges is the same.

List				Shpg.	Retail Price	List Price
No.		Watts	Finish	Weight	Each	Each
6210	Electric Radiant Radiator	600	Bronze	61/4 lbs.	\$7.50	<b>\$</b> 10.50

For devices to operate on voltages other than listed add 70 cents to list to operate by

### "AMERICAN BEAUTY" SOLDERING DEVICES

### Soldering Irons

All soldering irons are furnished complete, finished in polished nickel, with six foot cords and attachment plugs. Elements are removable and extra elements can be furnished complete with core.



### No. 3108 SOLDERING IRON

This is a light telephone iron adapted for switchboard work. Tips can be furnished that will extend several inches beyond the end of the iron. Can be bent to any angle desired.

List	Diam. of			Shape		Shpg.	Price
No.	Tips	Watts	Length	Tips	Wt.	Wt.	Each
†3108	5 in.	100	11 ins.	A	10 oz.	$1\frac{1}{4}$ lbs.	<b>\$9.80</b>

### No. 3110 SOLDERING IRON

This is for small light work only, such as soldering together small brass parts, connections, etc.

100 12 ins. C or D 3110 1/2 in. 1 lb.  $1\frac{1}{2}$  lbs. \$9.80

### No. 3111 SOLDERING IRON

This is a standard telephone iron used for switchboard and also by manufacturers upon small parts. It is the most popular iron for this class of work.

7 in. 100 1 lb. 3111 13 ins. 11/2 lbs. \$9.80

Always specify voltage when ordering.



#### No. 3120 SOLDERING IRON

It is for all around light work. Used by electric wiremen, lead glaziers, etc.

List	Diam. of			Shape		Shpg.	List Price
No.	Tips	Watts	Length	Tips	Wt.	Wt.	Each
3120	1 in.	150	12 ins.	C or D	1½ lbs.	2 lbs.	\$10.50

### No. 3121 SOLDERING IRON

This is for light constant work where a slightly hotter and heavier iron than the No. 3111 is required. 3121 11 in. 130 13 ins. R 13% lbs. 13/4 lbs. \$10.50

### No. 3130 SOLDERING IRON

This is a very satisfactory iron for all around work, heavy enough to do any ordinary soldering, and still not too heavy for the lighter work.

14 ins. C or D 3130 21/2 lbs. 2¾ lbs. 11/4 ins. 300 \$12.60

Always specify voltage when ordering.

Made in following voltage ranges: 95-104, 105-114, 115-125, 190-209, 210-229, 230-250. Furnished with six-foot cord directly attached.

For devices to operate on voltages other than listed add 70 cents to list

# "AMERICAN BEAUTY" ELECTRICAL DEVICES



### Soldering Irons

### No. 3131 Soldering Iron

List	Diam. of			Shape	Net	Shpg.	List Price
No.	Tip	Watts	Length	Tip	Wt.	Wt.	Each
3131	₩ in.	240	14 ins.	В	21/4 lbs.	2⅓ lbs.	\$12.60

### No. 3132 Soldering Iron

Adapted for model work, light pattern work, and for light tinsmith's work.

3132 1 in. 225 14 ins. C 1¾ lbs. 2 lbs. \$12.60

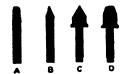
### No. 3123 Tipping Iron

This device is for use on special "Vacuum" soldering machines only. It is used by canning factories under the "Vacuum" system of soldering. It has no handle. The shank, 9 inches long, is made to fit into the machine.

(Without Tip)

3123 11/2 in. 150 14 ins. B 11/4 lbs. 2 lbs. \$11.20

Made in following voltage ranges: 95-104, 105-114, 115-125, 190-209, 210-229, 230-250. Furnished with six-foot cord directly attached.



# Extra Copper Tips

Numbers 3110, 3120, 3130 and 3132 are tempered cast tips. The others are drawn rod, the same size throughout, so that they can be extended or pulled out as the ends wear out. A or B tip can be bent to any angle desired. A or B tips should not be used on irons designed for C or D tips and vice versa.

List	Used on		Weight	List Price	List	Use on		Weight	List Price
No.	Iron No.	Shape	Tip only	Each	No.	Iron No.	Shape	Tip only	Each
3050	3110	Ċ	4 ½ oz.	\$1.76	3058	3111	A <sup>'</sup>	4 02.	\$1,26
3052	3120	$\mathbf{C}$	8 oz.	2.46	3059	3121	В	6 oz.	1.40
3054	3130	C	14 oz.	3.16	3060	3131	В	10 oz.	2.10
3056	3132	Ċ	8 oz.	2.46	3061	3140	В	1 1/2 lbs.	5.60
3057	3108	Ā	3 oz.	1.20	3063	3123	В	6 os.	1.40



No. 2720 Plate

# Laboratory Plates

List No.	Width	Length	Heat Reg.	Max. Watts	Net Weight	List Price Each
2720	9 ins.	12 ins.	3	860	30 lbs.	\$31.50
2730	9 ins.	18 ins.	3	1290	40 lbs.	45.50
2740	12 ins.	18 ins.	3	1720	48 lbs.	59.50
2750	12 ins.	24 ins.	3	2580	65 lbs.	<b>73.50</b>
2770	18 ins.	24 ins.	3	<b>344</b> 0	110 lbs.	98.00
2790	18 ins.	30 ins.	3	4300	135 lbs.	122.50

Voltages: Always specify voltage when ordering.

Made in following voltage ranges: 95-104, 105-114, 115-125, 190-209, 210-229, 230-250. Furnished with five-foot cord and No. 812 three heat porcelain switch for series multiple connection.

For devices to operate on voltages other than listed add 70 cents to list.

# "AMERICAN BEAUTY" ACCESSORIES





No. 812

# Temperature Regulators

By means of these Regulators or Rheostats, the temperature of the irons or other devices can be regulated from full heat to just enough to keep them warm. Made in following voltage ranges, 95-125, 190-250. A separate rheostat is necessary for each iron or device.

				For Devices Con-		List
List ·			No. of	suming not	Shpg.	Price
No.	Size	Height	Heats	more than	Wt.	Each
400	10 ins.	10½ ins.	5	400 watts	9 lbs.	<b>\$</b> 10.50
401	10 ins.	$10\frac{1}{2}$ ins.	5	600 watts	9 lbs.	10.50
402	10 ins.	101⁄2 ins.	5	800 watts	9 lbs.	11.90
403	10 ins.	$10\frac{1}{2}$ ins.	5	1000 watts	9 lbs.	11.90

# Three-heat Plug and Receptacle Switches

Adapted only for use with devices containing two heat elements arranged for series multiple connection-Switches are made entirely of porcelain with heavy brass contacts. May be used for open or concealed wiring, and have a capacity of twenty amperes at 250 volts.

cealed w	oring, and have a capacity of twenty amperes at 250 volts.	List
List		Price
No.	Description	Each
812	Plug and receptacle complete	\$3.16
813	Receptacle only	2.10
814	Plug only	1.06



807C

Black

**Electrical Heating Devices** 





Small spring only Digitized by TOOQ Each



.07

No.	For Use on	Descripcion	L	ast Price
803	(3B, 6½ B,	Plug complete	Each	\$0.70
803A	6210 and	Composition parts only	Per Pair	.42
803B	Luminous	Contact sleeves only	Per Pair	.28
803C	Radiators	Non-kink spring and bushing only	Each	. 14
803D	(	Assembling screws and nuts	Per Set	.07
804	<i>(</i>	Plug complete	Each	.70
804A	3 RH	Composition parts only	Each	.42
804B	6 RH	Contact sleeves only	Each	.28
804C	OKH	Non-kink spring and bushing only	Each	.14
804D		Assembling screws and nuts	Per Set	.07
805	ŀ	Plug complete	Each	2.46
805A	4530 to 4560	Composition parts only	Per Pair	1.40
805B	₹	Contact sleeves only	Per Pair	.84
805C	4630 to 4660	Non-kink spring and bushing only	Each	.28
805D	į.	Assembling screws and nuts	Per Set	.14
806	All irons 9 B	Plug complete		1.40
806A	and heavier	Porcelain parts only	Per Pair	.70
806B	4510, 4512	Contact sleeves only	Per Pair	.56
806C	4610, 4612,	Non-Kink spring and bushing only	Each	.21
806D	3240, 3245, 3250	Assembling screws and nuts	Per Set	.07
807	Toasters	Plug complete	Each	. 35
807A	Percolators, etc.	Porcelain part only	Each	.21
807B	Specify red or	Contact sleeve, washer and spring holder	. I. Each	.21

17

Detachable\_Composition Plugs and Parts

# AMERICAN BEAUTY ACCESSORIES









List		able Cords	List Price	
No.	Color	For Use On	Description	Each
830 831 832	Gold and black Gold and black Gold and black	3B, 6½B	Cord complete	. 2.10 . 1.40
840 841 842	Red and black Red and black Red and black	}3RH, 6RH	Cord complete	. 2.10 . 1.40
810 811 860	No. 14 black No. 14 black Brown silk	9B and all heavier irons	Cord and 806 plug	. 2.88 . 1.62
861 862	Brown silk Brown silk	6210	Cord and 803 plug only Eight foot cord only	. 2.46 . 1.76
833 834 815	Red and green Red and green Grav silk	3320 { Toasters,	Cord complete, 807 plugs	. 1.40
816 817	Gray silk Red and black	Percolators, Water heaters,	Twin, six foot cord only	. 1.76 . 2.46
818 823 824	Red and black Gray silk Gray silk	etc. Chafing dishes, Combination disc	Twin, six foot cord only	. 1.40 . 3.36
820 821	Red and black Red and black	and other devices having 3 heats	Cord complete, 807 plugs	. 3.36

# Heating Elements

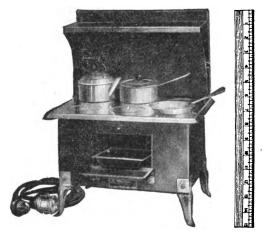
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				List					List
List				Price	List				Price
No.	Used on	No.	Watts	Each	No.	Used on	No.	Watts	Each
9003	Rite-Heat small size				9097	Curling iron heater	117	60	\$2.46
	iron	3RH	350	\$2.46	9091	Curling iron heater.	111	60	2.46
9006	Rite-Heat iron	6RH	525	2.46	9093	Curling iron heater.	113	60	2.46
9013	Little Beauty iron	3B	350	2.46	9095	Curling iron heater	115	60	2.46
9016	"American Beauty"				9090	Curling iron heater	150	60	2.46
	iron	6½B	525	2.80	9092	Curling iron heater	112	60	2.46
9019	Pressing iron	9B	675	4.20	9131	Air Heaters	250		2.80
9012	Pressing iron	12B	650	5.60	9185	Hot water urn	4315	600	6.30
9015	Pressing iron	16B	650	5.60	9186	Hot water urn	4320	800	8.40
9020	Pressing iron	20B	750	6.30	9187	Hot water urn	4325	1200	9.80
9021	Pressing iron	20HB	1000	6.66	9188	Hot water urn	4330	2000	11.20
9024	Pressing iron	24HB	1000	6.66	9195	Coffee urn	4420	1400	9.80
9026	Pressing iron	16VB	1100	7.00	9196	Coffee urn	4430	2000	11.20
9029	Pressing iron	20VB	1100	7.00	9197	Coffee urn	4440	3200	14.00
9030	"American Beauty"				9198	Coffee urn	4450	4200	19.60
	toaster	5825	440	2.80	9201	Glue pots	181	500	6.30
9035	Triangle Lektrik				9202	Glue pots	182	600	7.70
	toaster stove	3320	520	2.46	9204	Glue pots	184	1000	11.20
9037	Rite - Heat Glower				9210	Industrial disc stoves	3240	1000	7.00
	Stove	3350 .	660	2.46	9212	Industrial disc stoves	3245	1400	8.40
9040	Radiant radiator	6210	600	7.00	9214	Industrial disc stoves	3250	1800	9.80
9045	Water heater	5210	350	2.10	9250	Soldering irons	3108	90	4.90
9048	Triangle Baby Food				9252	Soldering irons	3110	100	4.90
	Warmer	<b>2510</b>	200	2.10	9254	Soldering irons	3111	95	4.90
9050	Disc stove	3210	450	3.16	9256	Soldering irons	3120	150	5.26
9051	Disc stove	3221	550	3.50	9258	Soldering irons	3121	130	5.26
9052	Disc stove	3231	600	4.20	9260	Soldering irons	3130	300	6.30
9056	Percolator	<b>2</b> 506	350	2.10	9262	Soldering irons	3131	240	6.30
9059	Percolator	<b>25</b> 09	350	2.80	9264	Soldering irons		270	6.30
9065	Chafing dish	<b>3</b> 55	600	6.30	9266	Soldering irons		425	7.70
9076	Tea samovar	<b>2</b> 306	450	3.16	9268	Tipping iron	3123	150	5.26
9080	Combination disc.	3310	600	6.30	l	<del>-</del>			

For Cords for devices to operate on 60 volts or less add 35 cents to list.

For elements for devices to operate on voltages other than standards given in-listing each article add 35 cents for voltages lower than 60 and 70 cents for voltages higher.

Digitized by Forested Particle Devices

### JUNIOR NO. 6



Junior Range No. 6 (Height 15 Inches)

# Western Electric

# Junior No. 6

### An Electrical Range for Children

The Junior range No. 6 is a practical, electric range in which cooking and baking can actually be done by children. It is an entirely new idea that has already proved remarkably popular. Its main feature is not only the pleasure it gives children, but it is invaluable also as an educator.

The Junior range is absolutely safe. Mothers may permit their children to use it freely without thought of danger.

For countless generations little girls have had to be content with the toy ranges in which no cooking could be done.

The construction of the Junior is substantial and is high grade throughout. It is guaranteed for one year, and with any kind of care will last for many years. It may be attached to any lamp socket, and consumes less current than an electric flatiron.

With every Junior range is furnished, free, a set of four nickel plated cooking utensils (tea-kettle, baking pan, stewpan and pot) and a cook book in words that children can understand.

#### Details

Height to top of shelf, 15 inches. Cooking surface,  $11\frac{1}{4} \times 8$  inches. Inside dimensions of oven,  $4\frac{1}{2}$  inches wide,  $2\frac{1}{4}$  inches high, 5 inches deep. Number of burners, 6. Net weight,  $7\frac{1}{2}$  lbs. Current consumption, 500 watts.

Finished in black enamel with nickel-plated top, legs and oven door front.

List No.	Re	etail Price Each	List Price Each
6 Jr.	Furnished complete with attachment plug, cord and switch. Any voltage 90-250.	\$8.00	\$12.00
6 Jr.	Furnished complete with attachment plug, cord and switch, 32 volts	9.00	14.40
		T	

Delivery F. O. B. Factory, Chicago, Ill. For warehouse deliveries write nearest house.

Electrical Heating Devices 26-2

## **ELECTRIC RANGES**





# Western Electric

# Ranges Nos. 56 and 60

No. 60 range for large families, boarding houses, restaurants, hotels, clubs, domestic science schools, etcIt has six (6) burner cooking surface, oven broiling compartment, warming closet, and two outside shelvesDimensions: Floor space 26½ x 59½ inches. Height of cooking surface 32½ inches. Area cooking surface
35 x 23½ inches. Oven dimensions 18 x 18 x 12 inches. Broiling compartment 18 x 18 x 8 inches. Warming closet 21½ x 20 x 9 inches. Total height 67 inches.

Position of oven cabinet: Burners, front right-hand cooking surface burner, 1500-750-375 watts. Lefthand and center front burners 1100-550-275 watts. Three rear burners 880-440-220 watts. Oven has
have best units area of 1800-600-450.

two heat units, each of 1100-550-275 watts. Broiling compartment has one heat unit of 1800-900-450

watts.

No. 56 is a somewhat smaller model than the No. 60, especially recommended for the average family. It has four (4) burner cooking surface, two-burner oven, one-burner broiler, warming closet, outside warming shelf, outside open shelf. Dimensions: Floor space 51 x 26½ inches. Height of cooking surface 32½ inches. Area cooking surface 23½ x 27 inches. Oven dimensions 18 x 18 x 12 inches. Broiling compartment 18 x 18 x 12 inches. Warming closet 21½ x 20 x 9 inches. Total height 67 inches.

Position of oven: Cabinet type, burners, front right-hand cooking surface burner, 1500-750-375 watts. Front left-hand 1100-550-275 watts. Two rear burners 880-440-220 watts. Oven has two heat units,

each of 1100-550-275 watts. Broiling compartment has one heat unit 1800-900-450 watts.

List		Wt.,	*List Pric	e Each
No.		Lbs.	Plain	Nickel
60	Electric range	500	\$240.00	\$256.00
56	Electric range	430	208.00	224.00
	Finish either plain or nickeled with white enameled splashers			

# Western Electric

# Range No. 50

This range is suitable for a medium or a large sized family, also for clubs, church kitchen, etc. It has four (4) burner cooking surface, two-burner oven, warming compartment, outside warming shelf, lower open shelf. Dimensions: Floor space 51 x 26½ inches. Height of cooking surface 32½ inches. Area cooking surface 23½ x 27 inches. Oven dimensions 18 x 18 x 12 inches. Warming closet 21¼ x 20 x 9 inches. Total height 58 inches. Cabinet type. Burners: Front right hand cooking surface burner 1500-750-375 watts. Front left-hand 1100-550-275 watts. Two rear burners 880-440-220 watts. Each of the two oven heat units 1100-550-275 watts.

Finish either plain or nickeled, with white enameled splashers.

List		Wt.,	*List Pric	ce Each
No.		Lbs.	Plain	Nickel
50	Electric range	400	\$176.00	\$188.00

All ranges are equipped with a lamp socket attachment. If not wanted, deduct \$1.60 from list price. All ranges, except Nos. 27, C-17, C-18 and C-2, will be furnished with one 4 inch, 500 watt. 3 heat burner for small base utensils, percolators, etc. This small burner will replace the left hand rear 880 watt burner.

Unless otherwise specified, plain finish will be furnished on all orders for ranges, \*Delivery F. O. B. Factory, Chicago, Ill. For warehouse deliveries write nearest house.

### **ELECTRIC RANGES**





No. 48

Western Electric
Range No. 48

No. 48 is designed for large families, boarding houses, restaurants, hotels, clubs, etc. It has six (6) burner cooking surface. Two-burner oven. Also elevated warming shelf if desired.

Dimensions. Floor space  $26\frac{1}{2} \times 34\frac{1}{2}$  inches. Height of cooking surface 34 inches. Area cooking surface 33 x 23\frac{1}{4} inches. Oven dimensions 18 x 18 x 12 inches. Height of stove with warming shelf 55 inches.

Position of Oven. Underneath.

**Burners.** Front right-hand cooking surface burner 1500-750-375 watts. Other two front cooking surface burners, each 1100-550-275 watts. Each of three rear cooking surface burners, 880-440-220 watts. Each of two-oven burners 1100-550-275 watts.

Finish. Either plain or nickeled. Equipped with white enameled splashers without additional charge.

List		Wt.,	*List Pric	e Each
No.		Lbs.	Plain	Nickel
<b>48</b>	Electric range, six burners underneath, 18 x 18 x 12 ins	275	<b>\$</b> 185.60	\$193.60
	Warming shelf extra, \$12.00 list.			

# Western Electric Range No. 40

No. 40 is a very compact range suitable for a small, medium or large family. It has four (4) burner cooking surface, two-burner oven. Elevated warming shelf if desired.

**Dimensions.** Floor space  $26 \times 29\frac{1}{2}$  inches. Height of cooking surface 34 inches. Area cooking surface  $28\frac{1}{4} \times 22\frac{1}{2}$  inches. Oven dimensions  $18 \times 18 \times 12$  inches. Height of stove with warming shelf 53 inches.

Position of Oven. Underneath.

Burners. Right-hand front cooking surface burners 1500-750-375 watts. Front left-hand 1100-550-275 watts. Two rear burners 880-440-220 watts. Each of the two-oven heat units 1100-550-275 watts.

Finish. Either plain or nickeled. Equipped with white enameled splashers, without additional charge.

List		Wt.,	*List Pric	ce Each
No.		Lbs.	Plain	Nickel
<b>4</b> 0	Electric range	185	<b>\$</b> 152.00	\$160.00

Warming shelf extra, \$12.00 list.

All ranges are equipped with a lamp socket attachment. If not wanted, deduct \$1.60 from list price. All ranges, except Nos. 27, C-17, C-18 and C-2, will be furnished with one 4 inch 500 watt, 3 heat burner for small base utensils, percolators, etc. This small burner will replace the left hand rear 880 watt burner.

Unless otherwise specified, plain finish will be furnished on all orders for ranges

\*Delivery F. O. B. Factory, Chicago, Ill. For warehouse deliveries write nearest house.

### ELECTRIC RANGES







No. 37 Electric Range



C-3 Electric Range

# Western Electric No. 47 Electric Range

The No. 47 range is very desirable for the average family that is not crowded for kitchen space. This is the cabinet type in a slightly smaller capacity.

Features. Three-burner cooking surface, two-burner oven, warming closet, outside elevated warming

shelf, outside lower shelf.

Dimensions. Floor space 51 x 26½ inches. Height of cooking surface 32½ inches. Area cooking surface 23½ x 27 inches. Dimensions oven 18 x 18 x 12 inches. Warming closet 21½ x 20 x 9 inches. Total height of stove 58 inches.

Position of Oven. Cabinet type.

Burners. Right-hand cooking surface burner 1500-750-375 watts: Front left-hand 1100-550-275 watts. Rear burner 880-440-220 watts. Each of two-oven burners 1100-550-275 watts.

Finish. Either plain or nickeled. Equipped with white enamelled splasher without additional charge.

List		Wt.,	List Pric	e Each
No.		Lbs.	Plain	Nickel
47	Electric range	400	\$160.00	\$172.00

# Western Electric No. 37 Electric Range

The No. 37 is designed to meet the needs of an ordinary sized family.

Features. Three-burner cooking surface, two-burner oven. Warming shelf if desired.

Dimensions. Floor space 26 x 29½ inches. Height of cooking surface 34 inches. Area cooking surface 28½ x 22½ inches. Dimensions oven 18 x 18 x 12 inches. Total height of stove with warming shelf 58 inches.

Position of Oven. Underneath.

Burners. Front right-hand cooking surface burner 1500-750-375 watts. Front left-hand 1100-550-275 watts. Rear burner 880-440-220 watts. Each of two-oven burners 1100-550-275 watts.

Finish. Either plain or nickeled. Equipped with white enamelled splasher without additional charge.

List		Wt.,	List Price Each	
No.		Lbs.	Plain	Nickel
37	Electric range	175	<b>\$</b> 135.20	\$143.20
	Warming shelf extra		12.00	12.00

### Western Electric C-3 Electric Range

C-3 range is a cabinet type range for the average family. Differs from C-4 in having smaller oven. Features. Three-burner cooking surface, two-burner oven, elevated outside warming shelf, lower outside shelf.

Dimensions. Floor space 25 x 43 inches. Height of cooking surface 34 inches. Area cooking surface  $22\frac{1}{4}$  x  $24\frac{1}{2}$  inches.

**Dimensions.** Ovens 18 x 12 x 12 inches. Total height of stove 54 inches.

Position of Oven. Cabinet type.

Burners. Right-hand cooking surface burner 1500-750-375 watts. Front left-hand 1100-550-275 watts. Rear burner 880-440-220 watts. Each of two-oven burners 880-440-220 watts.

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List				Wt.,	List Price
No.		•	Finish	Lbs.	Each
C-3	Electric range		Black enamel	260	\$144,00

All ranges are equipped with a lamp socket attachment. If not wanted, deduct \$1.60 from list price. All ranges except Nos. 27, C17, C18 and C2 will be furnished with one 4-inch 500 watt 3 heat burner for small base utensils, percolators, etc. This small burner will replace the left hand rear 880 watt burner. Unless otherwise specified, "Plain Finish" will be furnished on all orders for ranges.

Delivery F. O. B. Factory, Chicago, Ill. For warehouse deliveries write nearest house.

### **ELECTRIC RANGES**







C-4 Electric Range

# Western Electric

# C-2 Electric Range

The C-2 type range of popular cabinet type. For medium sized and small families.

Features. Two-burner cooking surface, two-burner oven, outside elevated warming shelf, lower outside shelf.

Dimensions. Floor space 36½ x 25 inches. Height of cooking surface 34 inches. Area cooking surface 23 x 18 inches. Dimensions oven 18 x 12 x 12 inches. Total height of stove 54 inches.

Position of Oven. Cabinet type.

Burners. Front cooking surface burner 1500-750-375 watts. Other cooking surface burner 880-440-220 watts. Each of two oven burners 880-440-220 watts.

Finish. Plain black enamel. Equipped with white enamel splasher without additional charge.

List			Wt.,	List Price
No.		Finish	Lbs.	Each
C-2	Electric range	Plain black enamel	240	\$128.00

# Western Electric

# C-4 Electric Range

The C-4 electric range is of the cabinet type and should prove highly popular with the average family.

Features. Three-burner cooking surface, two-burner oven, elevated outside warming shelf, outside lower shelf.

Dimensions. Floor space 49½ x 25 inches. Height of cooking surface 34 inches. Area cooking surface 22¾ x 24½ inches. Dimensions oven 18 x 18 x 12 inches. Total height of stove 54 inches.

Position of Oven. Cabinet type.

Burners. Right-hand cooking surface burner 1500-750-375 watts. Front left-hand 1100-550-275 watts. Rear burner 880-440-220 watts. Each of two-oven burners 1100-550-275 watts.

Finish. Plain black enamel. Equipped with white enamel splasher without additional charge.

List		Wt.,	List Price
No.	. Fir	nish Lbs.	Each
C-4	Electric range	ck enamel 275	\$152.00

All ranges are equipped with a lamp socket attachment. If not wanted, deduct \$1.60 from list price. All ranges except Nos. 27, C17, C18 and C2 will be furnished with one 4-inch 500 watt 3 heat burner for small base utensils, percolators, etc.

This small burner will replace the left hand rear 880 watt burner.

Unless otherwise specified, "Plain Finish" will be furnished on all orders for ranges.

Delivery F. O. B. Factory, Chicago, Ill. For warehouse deliveries write nearest house.

Electrical Heating Davices

### **ELECTRIC RANGES**





Western Electric

### Range No. 44

No. 44. This range is very popular because it uses small floor space and has elevated oven feature. Excellent for family of average size. It has four-burner cooking surface, two-burner oven, lower open shelf.

Dimensions. Floor space 32½ x 29½ inches. Height of cooking surface 31½ inches. Area cooking surface 26½ x 24½ inches. Oven dimensions 18 x 18 x 12 inches. Total height of stove 65 inches.

Position of oven. Elevated.

**Burners.** Right-hand front cooking surface burner 1500-750-375 watts. Front left-hand 1100-550-275 watts. Two rear burners 880-440-220 watts. Each of the two-oven heat units 1100-550-275 watts.

Finish. Either plain or nickeled. Equipped with white enameled splasher without additional charge.

List			Wt.,	*List Pric	e Each
No.	•		Lbs.	Plain	Nickel
44	Electric range.	Four-burner elevated oven, 18 x 18 x 12	300	\$170.40	\$178.40

# Western Electric

# Range No. 33

No. 33 is a standard range for the average family. Compact in floor space, designed for the housewife who prefers an elevated oven. It has three (3) burner cooking surface, two-burner oven, lower open shelf.

Dimensions. Floor space 29½ x 29½ inches. Height of cooking surface 31½ inches. Area cooking surface 22½ x 26½ inches. Dimensions oven 18 x 12 x 12 inches. Total height of stove 65 inches.

Position of Oven. Elevated.

**Burners.** Front right-hand cooking surface burner 1500-750-375 watts. Front left-hand 1100-550-275 watts. Rear burner 880-440-220 watts. Each of two-oven burners 880-440-220 watts.

Finish. Either plain or nickeled. Equipped with white enameled splasher without additional charge.

List			Wt.,	*List Pric	e Each
No.			Lbs.	Plain	Nickel
33	Electric range.	Three-burner elevated oven, 18 x 12 x 12	250	\$150.00	\$158.00

All ranges are equipped with a lamp socket attachment. If not wanted, deduct \$1.60 from list price. All ranges, except Nos. 27, C-17, C-18 and C-2, will be furnished with one 4 inch, 500 watt 3 heat burner for small base utensils, percolators, etc. This small burner will replace the left hand rear 880 watt burner.

Unless otherwise specified, plain finish will be furnished on all orders for ranges.

\*Delivery F. O. B. Factory; Chicago, Ill. For warehouse deliveries write nearest house.

### **ELECTRIC RANGES**





No. 27

# Western Electric

# Range No. 30

No. 30 is a small, compact range for small and medium sized families. Does every style of cooking perfectly. It has three (3) burner cooking surface, two-burner oven, with or without elevated warming shelf as desired.

Dimensions. Floor space  $34\frac{1}{2}$  x 19 inches. Height of cooking surface 34 inches. Area cooking surface 33 x  $14\frac{1}{4}$  inches. Oven dimensions  $18 \times 12 \times 12$  inches. Height of stove with warming shelf 58 inches.

Position of Oven. Underneath.

Burners. On cooking surface, center burner 1500-750-350 watts. Right hand burner 1100-550-275 watts. Left hand burner 880-440-220 watts. Each of two-oven burners 880-440-220 watts.

Finish. Either plain or nickeled. Equipped with white enameled splasher without additional charge.

List		Wt.,	*List Price Each		
No.		Lbs.	Plain	Nickel	
<b>30</b>	Electric range	150	\$130.00	\$138.00	
	Warming shelf extra			12.00	

# Western Electric

# Range No. 27

No. 27 is a most suitable range for the medium sized or small family with limited kitchen space. It has two (2) burner cooking surface, two-burner oven. Elevated outside warming shelf if desired.

**Dimensions.** Floor space 18 x 27 inches. Height of cooking surface 34 inches. Area cooking surface 25 x 14 inches. Dimensions oven 18 x 12 x 12 inches. Height of stove with warming shelf 58 inches.

Position of oven. Underneath.

Burners. Right-hand cooking surface burner 1500-750-375 watts. Left-hand cooking surface burner 880-440-220 watts. Each of two-oven burners 880-440-220 watts.

Finish. Either plain or nickeled. Equipped with white enameled splasher without additional charge.

List	•	Wt.,	*List Price
No.		Lbs.	Each
27	Electric range	. 150	\$113.20
27	Electric range with nickel trimming		121. <b>20</b>
	Warming shelf extra		12.00

All ranges are equipped with a lamp socket attachment. If not wanted, deduct \$1.60 from list price.
All ranges, except Nos. 27, C-17, C-18 and C-2, will be furnished with one 4 inch, 500 watt, 3 heat burner for small base utensils, percolators, etc. This small burner will replace the left hand rear 880 watt burner.

Unless otherwise specified, plain finish will be furnished on all orders for ranges.

\*Delivery F. O. B. Factory, Chicago, Ill. For warehouse deliveries write nearest house.

### ELECTRIC RANGE AND PORTABLE OVEN







Nos. 35 and 45

# Western Electric

# "C 18" Electric Range

Character. Two-burner cooking surface, two-burner oven. Elevated warming shelf if desired.

Dimensions. Floor space 17 x 25 inches. Height of cooking surface 35½ inches. Area cooking surface 25 x 14 inches. Dimensions oven 18 x 12 x 12 inches. Height of stove with warming shelf 58 inches

Position of Oven. Underneath.

Burners. Right-hand cooking surface burner 1500-750-375 watts. Other cooking surface burner 880-440-220 watts. Each of two-oven burners 880-440-220 watts.

Finish. Plain black enamel equipped with white enameled splasher without additional charge.

List			Wt.,	List Price
No.		Finish	Lbs.	Each
C-18†	Electric range P	Plain black enamel	150	\$88.00
	Warming shelf			12.00

# Western Electric

### Ovens No. 35 and No. 45

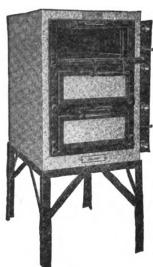
A portable oven is very convenient. It occupies but little space, is never in the way, yet is in every respect a most efficient and practical oven for all around service. It is constructed of black enameled steel, with cast iron legs, nickel plated or plain black finish. Heavily insulated to hold the heat in the oven. On a pyrometer test, after the current had been turned off entirely for one hour the oven was still at a baking heat. This oven is equipped with a broiler attachment, the same as is used in the ranges. The top and bottom units are controlled by separate three heat switches located below the oven door. These portables are made in two sizes. Portable oven No. 35, inside measurements,  $18 \times 12 \times 12$  inches. Burner one top, one bottom, each 880-440-220 watts. Portable oven No. 45, inside measurements  $18 \times 16 \times 12$  inches. Burner one top, one bottom, each 1100-550-275 watts.

List		Wt.,	*List Pric	e Each
No.		Lbs.	Plain	Nickeled
35	Portable oven	130	<b>\$64.00</b>	<b>\$72.00</b>
45	Portable oven	140	69.20	77.20

†All ranges are equipped with a lamp socket attachment. If not wanted deduct \$1.60 from list price. \*Delivery F. O. B. Factory, Chicago, Ill. For warehouse deliveries write nearest house.

### **ELECTRIC OVENS**





No. 150

# Western Electric

### Bake Ovens

These ovens have proven to give better results than fuel ovens. Especially adapted for hotels, bakeries, restaurants, etc. They are clean and compact, and have the advantage of perfect control of the heat supply. They are heavily insulated and radiate practically no heat. They occupy about one-fifth of the space required by brick ovens of the same capacity. In these ovens there is an absolutely ideal heat distribution. Instead of placing the heating elements in the bottom and depending on an uncertain and variable circulation of air the heat has been distributed for even baking through all parts of the article being cooked. In these ovens heat is more perfectly controlled, correctly applied and more uniform than in any other type in use, including the standard brick ovens. The body of these ovens rests on a substantial angle iron frame. The outside is of galvanized iron. The inside, which is entirely separate, is black steel. Won't it pay to eliminate ashes, smoot, soot, or the fumes of gas from your baking process, heat at the throw of a switch, heat that you can turn off the instant you are through, heat that is positively uniform and perfectly distributed, bake bread almost automatically and without attention.

List No.	No. 1-Lb. Loaves	No. 18 x 26 In. Roll Pans	No. Compartments		Size of Compart-	Н.	Sq. Ft. of Baking Surface	W.	Outside Dimensions in Inches	Н.	Projection of Switch Box On Right Hand Side-Ins.	Shipping Weight—Approximate Lbs.	Maximum Kw. Consumption per Hour	List Price Each
150	30 40	3 4 6	3	18 18	27 27	8	10 13	26 26	33	63 66	41/2	800 900	4 5 7.3	omirate)
175 200	60	6	3	37	27	8	20	45	33	63	$\frac{4\frac{1}{2}}{5\frac{1}{2}}$	1050	7.3	g g
215	80	8	4	37	27	8	27	45	33	66	51/2	1250	10	On Application
220	120	12	3	37	53	8	41	47	60	64	61/2	1550	15	On
300	180	18	3	37	80	9	61	47	90	67	$\frac{6\frac{1}{2}}{6\frac{1}{2}}$	6000	23	pla
315	270	27	3	54	80	9	90	64	90	67	8	9000	32	Ap
400	400	40	2	74	132	10	138	84	142	74	9	10000	50 75	
415	600	60	4	56	134	10	208	122	144	74		13000	75	

Ovens Nos. 220, 250, 300, 315 and 400 are shipped knocked down.

Decks of ovens with tile decks have a 7 inch clearance, instead of 8 inch, unless ordered specially.

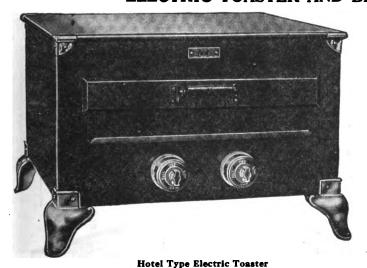
An accurate pyrometer can be supplied at an extra price of \$26.80 list.

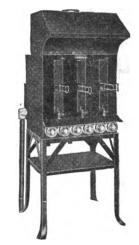
These ovens can also be used for roasting meats, poultry, etc. Also for baking cores and any other work

We can also build special ovens for enameling and other purposes.

Delivery F. O. B. Factory, Chicago, Ill. For warehouse deliveries write nearest house.

# **ELECTRIC TOASTER AND BROILER**





Hotel Broiler, Vertical Type

# Western Electric Hotel Type Electric Toaster

This toaster is an entirely practical electrical toaster, especially adapted to hotels, restaurants, etc., where large quantities of good toast are needed quickly. The Hughes Hotel Type Toaster has a capacity of 16 slices simultaneously. It has two trays, one above and one below the heat unit. Bread in the upper tray is toasted on the lower side. Then the trays are interchanged, and the toasting is completed on both sides. No heat is wasted. Only one operation is required. Every piece is toasted evenly, to an appetizing brown. This toaster goes anywhere—kitchen, butler's pantry or dining-room. It is ready at the turn of the switch—off again when you are through. Finished in nickel plate throughout. Each of the two toasting racks measures 8 inches by 18½ inches. Outside dimensions, 9¼ inches wide, 19 inches deep, 9 inches high. Maximum current consumption is 3 K.W

List No.	*List F	rice Each
T-316	Hotel type electric toaster	\$92.00
T-316R	Extra toasting rack	4.00

# Western Electric

### Hotel Broiler

The Western Electric hotel broiler of the vertical type is especially adapted for hotels, clubs, cafeterias, restaurants, etc., where there is a large demand for broiled meats. This broiler applies an intense heat, sears the surface of meats instantly, and retains practically all juices. Both sides of the meat are broiled at the one time. Having three separate broiling compartments, three different kinds of meat or fish can be broiled at the one time without an interchange of orders. Consumes electricity only while you are using it.

Equipment. All walls are heavily insulated to conserve the heat. Three separate compartments, each containing two heating elements—one on each side, controlled by separate three-heat switches, making it possible to secure any variation of heat instantly. Also equipped with three broiling racks.

List No.	**	mensions—— Depth Height	Inside Dimensions of Each Compartmen	Voltage t	lbs.	List Price	
UB-153			2½ x 14 x 15 ins.			480	<b>\$296</b> .00

NOTE: Each compartment consumes 5 K.W. or  $2\frac{1}{2}$  K.W. per unit.

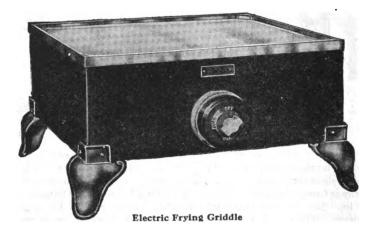
### 396

# ELECTRIC WATER HEATER, RANGE AND GRIDDLE





Kitchenette Range



# Western Electric

List	Water Heater	Std.	List Price
No.		Wt.	Each
101 102	Electric water heater, 2000 W. three heat circulation type	25 lbs.	\$32.00 24.00

# Western Electric

# Kitchenette Range

The Western Electric Kitchenette Range is designed for one, two and three room apartments. For cabinet or "In-a-wall" type kitchen.

Equipment. It has two surface burners and a medium sized oven. The right surface burner consumes 500 watts and the left 1,100 watts. The oven has a top and bottom burner, each consuming 660 watts. The top burner is used for broiling. Total connected load, 2.920 watts.

				Cooking	Oven			List
	Length	Width	Height	Surface	Inside		Wgt.	Price
Western Electric	Ins.	Ins.	Ins.	Ins.	Ins.	Finish	Lbs.	Each
Kitchenette Range	33	16	22	15 x 21	10 x 10 x 12	Black enamel	125	<b>\$</b> 75.20

# Western Electric Electric Frying Griddle

This griddle is made expressly for frying fish, eggs, bacon, chops, steaks, etc., and also for use as a cake griddle. It is solidly constructed of steel and cast fron, and supported on four nickel-plated legs. Dimensions, 18 x 18 inches; height 6 inches. The maximum current consumption is 3 K.W. List No. List Price

G318 \$96.00 Electric frying griddle..... Delivery F. O. B. Factory, Chicago, Ill. For warehouse deliveries write nearest house.

# Western Electric RANGES AND PORTABLE OVENS





# No. C-17 Electric Range

The No. C-17 electric range is especially adapted for the medium family.

Features. Has two-burner cooking surface. A detachable oven, without burners of its own, fits snugly over this cooking surface, thus using cooking surface burners for oven work.

Dimensions. Floor space 26½ x 15¾ inches. Height of cooking surface 29 inches. Area cooking surface, 23½ x 12¾ inches. Dimension of oven 18 x 11 x 18 inches. Height of stove with oven 41 inches.

Burners. Each of two burners 1100-550-275 watts.

List	rners. Each of two burners 1100-550-275 watts.	•	Vt. List Price
No.	Fin	ish . Li	bs. Each
C-17	Electric range with oven	k enamel 90	\$56,00
C-17	Electric range without oven,		
O-17	Oven only		5 22.40







Portable Oven with No. 15 Two-burner Hot Plate

### Portable Ovens

No. "9" Portable Oven. For medium sized or small family. It is large enough for two pies, two loaves of bread, small roasts, etc.

Dimensions. Floor space 17 x 15 inches. Height 15¾ inches. Inside dimensions 10¼ x 11 x 9 inches. Burner. One burner (bottom) your choice of either 880-440-220 watts, or 660-330-165 watts.

Accessories, two adjustable racks and attachment plug cord.

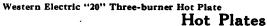
No. 15 Oven. Has no heat unit of its own. It is specially designed to set on No. 15 hot plate.

Dimensions. Inside, 17 x 13 x 8 inches. Height of oven and of No. 15 hot plate, 20 inches. Accessions. sories, two adjustable racks. List Price

Lia No		Wt. Lbs.	Each 880 Watts
ç	Portable electric oven. Finish, body and door in dull (egg shell) black enamel; cor-		
	ners, legs and door support, nickel plated	35	\$22.40
015	Portable oven, nickel finish. Fits No. 15 Hot Plate	5	19.60
010	Portable oven, nickel finish. Fits No. 10 Hot Plate		12.60
	Portable oven, nickel finish. Fits No. 10 Hot Plate	-	

# Western Electric Western Electric HOT PLATES AND RADIATORS







Western Electric "10" Hot Plate

No. 20 Three-burner Hot Plate. Has a cooking surface  $14 \times 32$  inches, stands  $6\frac{1}{2}$  inches high. Right-hand burner 1500-750-375 watts. Left-hand burner 880-440-680

No. 10 Hot Plate. Single burner cooking surface  $10\frac{1}{2} \times 10\frac{1}{2}$  inches, stands  $5\frac{1}{2}$  inches high. of either 880-440-220 or 660-330-165 watts.

No. 15 Two-burner Hot Plate. Cooking surface 10 x 21 inches, stands 6½ inches high. Right-hand burner 1500-750-375 watts. Left-hand burner 880-440-220 watts. List Price List Each No. Lbs. Nickel \$52.00 20 Three-burner hot plate with one 1500, one 1100 and one 880 watt burner..... 60 Single burner hot plate (880 watt)..... 10 17 16.00 Single burner hot plate (1500 watt)..... 10 17 20.80 15 Two-burner hot plate with two 1100 watt burners..... 35 33.60 Two-burner hot plate with one 1500 and one 880 watt burner..... 35 36.00 All hot plates can be supplied in white enamel finish at \$1.60 list additional per burner.



No. 5 Table Stove



Coffee Urn Heater

"5" Table Stove No. 5 Table Stove. Has cooking surface 7½ inches diameter. Heating unit 6½ inches diameter. Height: 51/2 inches.

Current consumption, 660 watts. Accessories, attachment cord and plug switch is situated right on cord. A single heat, fed through switch. Wt. List Price List No.
5 Table stove..... Finish Lbs. Each \$9.80 Nickel

Coffee Urn Heater

The Western Electric coffee urn heater is made in three sizes. Capacities 1500-1100-800 watts, each having three heats. List Price List No. Each Coffee urn heater, 1500 watt size..... UH-15 \$20.80 Coffee urn heater, 1100 watt size. UH-11 17.60 UH-8 Coffee urn heater, 880 watt size..... 16.00



Western Flectric Radiator

			Kadı	lators			
List		Length	Width Base	Height	Wt.		List
No.	Wattage	Inches	Inches	Inches	Lbs.	Heat	Price
106	660	15	9	171/2	12	1	\$12.00
110	660	15	9	171/2	121/2	3	14.40
116	1000	15	9	$17\frac{1}{2}$	12	1.	16.00
119	1000	15	9	$17\frac{1}{2}$	$12\frac{1}{2}$	3	18.40
125	1500	15	. 9	$.20\frac{1}{2}$	$13\frac{1}{2}$	3	22.40
130	2000	15	9	$23\frac{1}{2}$	141/2	3	25.60
136	2500	191/2	9	23	$23\frac{1}{2}$	3	32.00
142	3000	$19\frac{1}{2}$	9	23	$23\frac{1}{2}$	3	38.40
154	4000	$22\frac{1}{4}$	9	23	25	3	48.00
_					•		

Nos. 106 and 110 are furnished with seven feet of cord and an attachment plug. Nos. 116 to 130 are furnished with seven feet of cord without attach-

ment plug. Single heat radiators are not equipped with a switch. Delivery F. O. B. Factory, Chicago, Illoy For warehouse deliveries write nearest house.

SUNBEAM INCANDESCENT LAMPS
Standard Bases



Style No. 600 Miniature Screw Base



Style No. 500 Candelabra Screw Base



Style No. 1000 Bayonet Candelabra Base Double Contact



Style No. 1100 Bayonet Candelabra Base Single Contact



Medium Screw Base (One-half Size)



Mogul Screw Base (One-half Size)



Skirted Medium Screw Base (One-half Size)

#### Bases

The prices in each schedule cover only lamps fitted with the base or bases stated therein. The price of lamps fitted with other bases may be obtained on application.

Lamps regularly fitted with Medium Screw Unskirted Base, if fitted with Medium Screw Skirted Base, will take an additional charge of 20 cents to list prices.

There shall be no reduction in the price of lamps which are regularly based when furnished unbased.

### Instructions

### Special Styles

We can furnish headlight, resistance, telephone switchboard, navy, torpedo, battery inspection, diving, Fisk instrument, gun, scarf pin, midget base, optical, surgical and dental lamps, in fact any special type in addition to the standard styles listed in this bulletin.

#### Extra Charges

All extra percentage charges shall be figured on the basic list price of the clear lamps.

### Tipless Lamps

The prices given cover lamps with a tip unless otherwise indicated; for tipless lamps the additional charge is 10% on Gem and 20% on Mazda.

For anchoring filaments to the bulb in Gem lamps, except in the case of such lamps as are regularly standardized with bulb anchored filaments, an additional charge of 6 cents list price for each anchor shall be made.

#### Frosted Lamps

The prices for frosted lamps cover only lamps either bowl frosted or all frosted, except where Bull's-Eye frosting is specifically mentioned. The prices of any lamps with special frosting may be obtained on application.

#### Colored Lamps

For superficial coloring, excepting opal, add 15 per cent. to list price of clear lamps. For superficial-opal coloring (opal dipping) a lamp, the list additional charge to the price of the lamp is the same as the list additional charge for frosting the lamp. When 10,000 or more of any one color of superficially colored lamps, or 10,000 or more frosted lamps (not including a combination of the two) are ordered at one time, the additional charges are two-thirds the regular charges. Superficially colored Mazda lamps are not recommended. For natural colored lamps add the following percentage charges to the price of clear lamps:

(S-17-19-21-30 PS-20-22-25

	G-181/2-25-30 and T-10 Bulb)	S-14 Bulbs
Green-Blue	50%	25%
Purple	75%	35%
Ruby-Opal	100%	50%
Amber-Canary	150%	60%

The extra charges given above cover only bulbs of the manufacturers' standard colored glass. Specially colored glass bulbs will take a higher price, which will be furnished upon application.

### **Etching Letters**

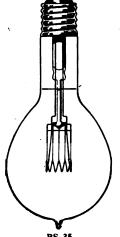
The following charges for etching letters or designs on lamps are net and subject to no discount.

Size in Watts . Net Price of

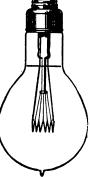
Class of Lamp	(For Street Series Lamps, Size in Candlepower)	Etching per Lamp
Mazda	50 or less	½c ¾c
Mazda	Over 50, to and including 80	3/4 c
Mazda	Over 80, to and including 150	1 c
Mazda	Over 150, to and including 250	11/4c
Mazda	Over 250 All sizes GOOGL	1½c
Carbon	Allisizes y GOOSIC	1 ½ c 1 ½ c ½ c
3	Incandes	cent Lamps







PS-35 300 Watts 105-125 Volts



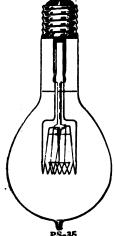
PS-30 200 Watts 105-125 Volts



S-17, S-19 or S-21 10,15,20,25,40 or 60 Watts 105-125 Volts 5, 40 and 60 Watts 220-250 Volts



PS-25 100 Watts 105-125 Volts



PS-35 300 Watts 220-250 Volts

### LARGE STYLE-STRAIGHT SIDE TYPE

Above are shown some of the regular multiple Mazda lamps for ordinary lighting requirements.

List		Size of Lamp	Watts per	Type and	Diam.	Maximum Over All	Base	Std.	Price Each	
No.	Volts	in Watts	Spherical C. P.	Size Bulb	Bulb Inches	Length Inches	Regularly Supplied	Pkg. Qty.	Clear	Frosted
400000		10	1.67	S-17	21/8	45/8	Med. Screw	100	\$0.54	\$0.60
400001		15	1.47	S-17	$2\frac{1}{8}$	45/8	Med. Screw	100	.54	.60
400002	105	20	1.41	S-17	21/8	45/8	Med. Screw	100	.54	.60
400003		25	1.39	S-19	23/8	51/4	Med. Screw	100	.54	.60
400004	to {	40	1.35	S-19	23/8	51/4	Med. Screw	100	.54	.60
400392	120	50	1.33	S-19	23/8	51/4	Med. Screw	100	.56	.62
400005	1	60	1.31	S-21	25/8	$5\frac{1}{2}$	Med. Screw	100	.72	.80
400007	i	100	1.26	S-30	33/4	7 7/8	Med. Scr. Sk.	24	1.30	1.44
400010	1	25	1.65	S-19	23/8	51/4	Med. Screw	100	.66	.72
400011	220	40	1.52	S-19	23/8	51/4	Med. Screw	100	.66	.72
400012		60	1.46	S-21	25%	57/8	Med. Screw	100	.90	.98
400013	250	100	1.39	S-30	3¾	71/8	Med. Scr. Sk.	24	1.60	1.74
400014	200	150	.1.33	S-35	43/8	77/8 83/4	Med. Scr. Sk.	24	2.40	2.60
400015		250	1 20	S-40	5 🐧	10	Med. Scr. Sk.	12	4.00	4.30

### PEAR SHAPE—TYPE C†

400393		(   75	1.09	PS-22	23/4	61/8	Med. Screw	50	\$1.30	\$1.40
400368	i	▲100	1.00	PS-25	$3\frac{1}{8}$	71/8	Med. Screw	24	2.00	2.10
	i	150	.92	PS-25	$31\frac{8}{8}$	71/8	Med. Screw	24	3.00	3.10
400315		<b>▲200</b>	.86	PS-30	33/4	83/8	tMed. Screw	24	4.00	4.10
400316	105	4300	.78	PS-35	43/8	934	Mog. Screw	24	6.00	6.20
400317	to	400	.82	PS-40	5	10	Mog. Screw	12	8.CO	8.34
400318	125	▲500	.78	PS-40	5	10	Mog. Screw	12	9.00	9.30
400319	l	<b>▲750</b>	.74	PS-52	$6\frac{1}{2}$	133/8	Mog. Screw	8	12.00	12.50
400320	l	[   ▲1000	.70	PS-52	$6\frac{1}{2}$	1338	Mog. Screw	8	14.00	14.50
400372	l	<b>∤   ^</b> 200	1.00	PS-30	$3\frac{3}{4}$	83/8	Med. Scr. Sk.	24	4.40	4.54
400373	220	]   ▲300	.92	PS-35	43/8	934	Mog. Screw	24	7.20	7.40
400374		4400	.90	PS-40	5	10	Mog. Screw	12	9.60	9.90
400375	250	1 ▲500	.85	PS-40	5	10	Mog. Screw	12	10.80	11.10
400376	200	<b>▲</b> 750	.82	PS-52	$6\frac{1}{2}$	1338	Mog. Screw	8	14.50	14.90
400377	1	[   ▲1000	.78	PS-52	$6\frac{1}{2}$	1338	Mog. Screw	8	17.30	17.30
				·		·				

Standard package discounts on all large style Mazda lamps can be given only on orders for exact (standard package) quantities or multiples thereof. It is allowable, however, to combine in one standard package all sizes of large style Mazda lamps having the same standard package quantity. Such lamps may be of different voltages and finish of bulb.

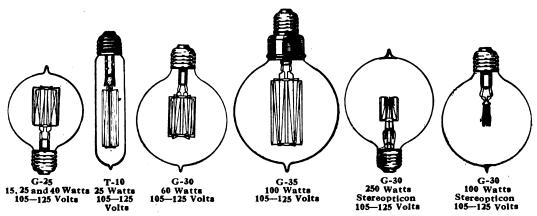
Lamps of voltages of 100 to 109, 126 to 130 inclusive, 200 to 219 and 251 to 260 inclusive are not regularly carried in stock, but may be obtained at the same list prices.

†Mazda C lamps are not recommended all frosted. Where frosting is necessary, bowl frosting is to be preferred, and it is particularly recommended for lamps of 300 watts or less which are to be used in interior lighting where the glare would otherwise be objectionable. Orders should specifically state if lamps are to burned in other than pendent position.

‡Mogul screw base regularly supplied and recommended. Medium screw skirted base can be supplied at same price when specially ordered, but is not recommended, and attention is called to the face that it is contrary to the Underwriters' rules to use Mazda C lamps of this wattage in the medium screw sockets. With the medium screw skirted base the maximum overall length of this lamp is 10½ inches, and the light center length is 7½ inches

These are the Mazda C Nitrogen filled lamps. Not recommended frosted.

# Western Electric SUNBEAM INCANDESCENT LAMPS



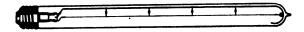
# Round-Bulb and Tubular Mazda Lamps

Round-bulb lamps are often preferred to the regular type because of their decorative value. The 400 and 500 watt sizes supply the demand for efficient units of high candle-power without the intricate mechanism usually found in units of this size.

The tubular lamp is especially adapted to such classes of work as show-case or cornice lighting—where

a line source is necessary to light confined spaces or to define outlines.

List	Volts	Size of Lamp	Watts Per	Type and	Diam. Bulb	Maximum Over All	Base Regularly	Std. Pkg.	Price	Each
No.	10.00	in Watts	Spherical C. P.	Size Bulb	Inches	Length Inches	Supplied	Qty.	Clear	Frosted
-					ROUN	D BULB				
400016	7 1	15		*G-25	31/8	484 484 484 51/2	Med. Screw	50	\$0.90	\$1.00
400017	110	25	1.35	*G-25	31/8	43/4	Med. Screw	50	.90	1.00
400018	to {t	40	1.33	G-25	31/8	484	Med. Screw	50	.90	1.00
400019	125	60	1.23	G-30	33/4	51/2	Med. Screw	24	1.30	1.44
400020		100	1.18	G-35	334 43/8	71/4	Med. Scr. Sk.	24	1.90	2.10
400024	220	25	1.63	G-25	31/8	48/	Med. Screw	50	\$1.10	\$1.20
400025	250 (†	40	1.51	G-25	31/8	43/4 43/4	Med. Screw	50	1.10	1.20



### T-8 25 and 40 Watts **TUBULAR**

400029 400288 400289	110 to 125	25 25 40	1.38	T-10 T- 8 T- 8	11/4 1 1	57/8 12 12	Med. Screw Med. Screw Med. Screw	100 50 50	\$1.00 1.90 1.90	\$1.10 2.10 2.10
				ROU	ND STE	ŔEOPTIC	ON		•	
400033 400354	$\left\{ {110\atop 125} \right\}$ †	100 250	1.00 .80	G-25 †G-30	3½ 3¾	5 5½	Med. Screw Med. Screw	50 24	\$2.70 5.40	

\*The 15 and 25-watt, 110 to 125 volt round bulb Mazda lamps are regularly supplied in the G-25 bulb. These lamps can be supplied in G-18½ bulb (standard package quantity 100) at \$0.90 clear and \$0.96 frosted.

Lamps of voltages 100 to 109, 126 to 130 inclusive, 200 to 219, 251 to 260 inclusive, are not regularly

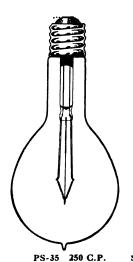
carried in stock but may be obtained at the same list prices.

†Mazda C lamp. This lamp may be supplied without extra charge fitted with unskirted Mogul screw base (Style 400), giving a light center length of 3½ inches and a maximum overall length of 5% inches. Can be burned in any position except vertically, base up.

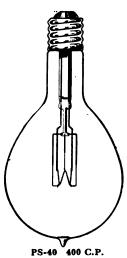
Standard package discounts on all large style Mazda lamps can be given only on orders for exact standard package quantities or multiples thereof. It is allowable, however, to combine in one standard package all sizes of large style Masda lamps having the same standard package quantity. Such lamps may be of different voltages and finish of bulb.

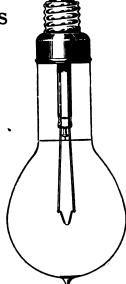
Prices on application.

# Western Electric SUNBEAM INCANDESCENT LAMPS









PS-40

600 C.P.

Street-Series Lamps

Mazda Street-Series lamps are designed for use on constant-current circuits, either in series with arc lamps or in straight Mazda systems. Mazda street-lighting systems are characterized by pleasing uniformity of illumination and freedom from flicker, excessive glare and long shadows. Their decorative value alone has done much to bring them into popular favor.

MAZDA, STREET-SERIES STYLE

Fitted with Mogul screw base (Style 400). Medium screw skirted base (Style 100) also supplied at same price, except the 400, 600 and 1000 C.P. lamps, which are supplied only with Mogul screw skirted or unskirted base (Style 400) as indicated.

				Style		Over All	Base	Std.	Price	e Each
List No.	Amperes	Candle- Power	Average Volts	and Size Bulb	Diam. Inches	Length Inches	Regularly Supplied	Pkg. Qty.	Clear	*Frosted
400048	1	( 60	8.5	S-241/2	316	71/4	Mog. Screw	50	\$2.00	\$2.10
400049		80	10.8	S-241/2	3 1 6	71/4	Mog. Screw	50	2.40	2.50
400050	5.5	{ 100	13.0	8-241/2	316	71/4	Mog. Screw	50	2.40	2.50
400051		250	29.7	PS-35	43/8	. 934	Mog. Screw	24	4.70	4.90
400052	1	400	47.4	PS-40	5	10	Mog. Screw	12	8.00	8.30
400055		60	7.1	S-241/2	$3\frac{1}{16}$	71/4	Mog. Screw	50	2.00	2.10
400056		80	9.1	S-241/2	31/16	71/4	Mog. Screw	50	2.40	2.50
400057	0.0	100	10.9	S-241/2	$3\frac{1}{16}$	71/4	Mog. Screw	50	2.40	2.50
400058	6.6	250	23.5	PS-35	43/8	93/4	Mog. Screw	24	4.70	4.90
400059		400	37.1	PS-40	5	10	Mog. Screw	12	8.00	8.30
400355	0.11	600	55.7	PS-40	5	10	Mog. Screw	12	10.00	10.30
400062	12 21	60	6.4	S-241/2	3 1/16	71/4	Mog. Screw	50	2.00	2.10
400063	The same	80	8.0	S-241/2	$3\frac{1}{16}$	71/4	Mog. Screw	50	2.00	2.50
400064	7.5	100	9.6	S-241/2	$3\frac{1}{16}$	71/4	Mog. Screw	50	2.40	2.50
400356	1.5	250	19.6	PS-35	43/8	93/4	Mog. Screw	24	4.70	4.90
400357		400	30.5	PS-40	5	10	Mog. Screw	12	8.00	8.30
400358	17.33	600	45.8	PS-40	5	10	Mog. Screw	12	10.00	10.30
400359	15.0	400	14.4	PS-40	5	$12\frac{1}{2}$	Mog. Screw	12	8.00	8.30
400360	20.0	f 600	15.5	PS-40	5	121/2	Mog. Screw	12	10.00	10.30
400361	20.0	1000	25.9	PS-40	5	121/2	Mog. Screw	12	22.60	12.30

Orders for lamps of 250 C.P. and higher should specifically state if they are to be burned in other than pendant position.

\*These lamps are not recommended frosted. If frosted lamps are required, bowl frosted lamps are preferable.

Standard package discounts on all large style Mazda lamps can be given only on orders for exact standard package quantities or multiples thereof. It is allowable, however, to combine in one standard package all sizes of large style Mazda lamps having the same standard package quantity. Such lamps may be of different voltages and finish of bulb.

Prices on application. Series lamps selected for use on multiple compensators or for any other purpose where a single voltage or a range of voltages closer than stated are required will take a special price, which may be obtained upon application. Digitized by



S-24½ 94 Watts 105-130 Volts

Western Electric

SUNBEAM INCANDESCENT LAMPS







S-17 10, 15 and 20 Watts 25-34 and 50-65 Volts 25-34 and 50-65 Volts



G-25 100-150 Watts 30-34 Volts



G-25 72 Watts 51/2 and 6 Volts



G - 3040 25-34 and 50-65 Volts 75 Watts 30-34 and 60-65 Volts

# Mazda Street-railway Lamps

G-19

25 and 40 Watts

Straight Side

List No.	Voltage	Bul		Max. Over all	Base \ Regularly	Size of Lamp	ĺ	Watts per	Std. Pkg.	Price	Each
No.	Volume	Style		Length Inches	Supplied	in Watts	Amperes	Spherical C. P.	Qty.	Clear	Frosted
400065 400066 400067 400068	105 110 115 120 125 130	S-19 S-19 S-21 S-24½	23/8 23/8 25/8 3 16	$5\frac{1}{2}$	Med. Screw Med. Screw Med. Screw Med. Screw Sk.	23 36 56 94	.214 .342 .519 .863	1.46 1.42 1.33 1.28	100 100 100 50	\$0.54 .54 .72 1.30	\$0.60 .60 .80 1.44

All the lamps listed above are selected for amperes and are labeled for use, five in series, on 525, 550, 575, 600, 625 and 650 volts.

# Mazda Train-lighting and Compensator Lamps

Mazda-Round

			ze of	1 1120	s per_	Туре	Diam.	Max.	Base	Std.	Price	Each
List No.	Volts		amp in Vatts	Spherica 30-34	60-65	and Size Bulb	Bulb Inches	Length Over All Inches	Regularly Supplied	Pkg. Qty.	Clear	Frosted
400071 400072	30-34		10 15	\$1.44 1.38	\$1.51 1.44	G-18½ G-18½	2 5 18 2 5	$\frac{3\frac{3}{4}}{3\frac{3}{4}}$	Med. Screw Med. Screw	100 100	\$0.72 .72	\$0.78 .78
400073	and	<b> </b> ‡	20	1.36	1.42	$G-18\frac{1}{2}$	$2\frac{5}{16}$ $2\frac{5}{16}$	334	Med. Screw	100	.72	.78
400074 400075	60-65		25 40	$1.36 \\ 1.24$	$\begin{array}{c c} 1.42 \\ 1.22 \end{array}$	G-18½ G-30	$\frac{2\frac{5}{16}}{3\frac{3}{4}}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Med. Screw Med. Scr. Sk.	$\frac{100}{24}$	$\begin{array}{c c} .72 \\ 1.30 \end{array}$	1.44
400362	30-34		75	.95	.95	G-30	33/4	61/4	Med. Scr. Sk.	24	1.50	1.64
400302	and 60-65	<u> </u> † }	. 10	.90	. 80	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	374	0 %	Med. Scr. Sk.	24	1.50	1.04

### Mazda-Straight Side

10000		_	10	61 07	01 44	143 177 4	01/	1 457	N. N. J. C.	1 100	110 54	100.00
400085			10	\$1.37	\$1.44	S-17	21/8	498	Med. Screw	100	<b>\$</b> 0.54	<b>\$</b> 0.60
400100	30–34		15	1.31	1.38	S-17	$2\frac{1}{8}$	45%	Med. Screw	100	.54	.60
400156	and	‡ -	20	1.29	1.36	S-17	$2\frac{1}{8}$	45/8	Med. Screw	100	. 54	. 60
400115	60-65		25	1.29	1.36	S-19	23/8	51/4	Med. Screw	100	. 54	.60
400116		1	50	1.24	1.24	S-19	23/8	51/4	Med. Screw	100	.54	. 60
400379	51/2		36	<b>.</b>		G-18½	2 5	33/4	Med. Screw	100	2.50	
400380	and	* .	72			G-25	31/8	434	Med. Screw	50	3.00	
400381	6	'	108			G-30	33/4	5 1/8	Mog. Screw	24	3.50	
400382			100			G-25	$3\frac{1}{8}$	43/4	Med. Screw	50	3.00	
400383	30-34	١.	150			G-25	31/8	43/4	Med. Screw	50	4.00	
400384			250	1		†G-30	33/4	$5\frac{1}{2}$	Med. Screw	24	6.00	

Standard package discounts on all large style Mazda lamps can be given only on orders for exact standard package quantities or multiples thereof. It is allowable, however, to combine in one standard package all sizes of large style Mazda lamps having the same standard package quantity. Such lamps may be of different voltages and finish of bulb.

†Can be burned in any position except vertically, base up.

\*The 36, 72 and 108 watt lamp (nominal ratings) consume 6, 12 and 18 amperes respectively.

‡Lamps of voltages of 25 to 29 inclusive and 50 to 59 inclusive are not regularly carried in stock, but may be obtained at the same list prices.

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# Western Electric SUNBEAM INCANDESCENT LAMPS



Flat End Opal Back



Flat End Opal Back







in. Round

### Mazda Novelty Lamps

Mazda Class-Miniature Style-Round and Flat End Types for Novelty Service \*Regularly fitted with Miniature Screw Base

List No.	Description	Volts	‡Amperes	Type and Size Bulb	Diam. Bulb, Inches	Maximum Over All Length, Inches	Base	Unit Pkg. Qty.	Price Each Clear
400086	-	2.7(b)	.35	G-3½	7	15	Min.	10	\$0.17
400087	Flashlight—	3.8(c)	.35	G-3½	7	15 16 15 16	Min.	10	.17
400088	clear	2.9(b)	.35	G-4½	9	11/8	Min.	10	.17
400089	Side-tip or	3.8(c)	.35	G-4½	9	11/8	Min.	10.	.17
400090	tipless	4.0(c)	.35	G-41/2	9	11/8	Min.	10	.17
400091		6.2(d)	.35	$G-5\frac{1}{2}$	7 16 9 16 9 16 9 16 9 16 11 11	1 3 16	†Min.	10	.17
400092	Flashlight—	( 2.5(a)	.35	FE-33/4	15 32	3/4	Min.	10	.17
400093	opal back	3.8(c)	.35	FE-33/4	15 32	3/4 3/4	Min.	10	.17
400094	tipless	2.5(a)	.25	FE-41/4	17	13	Min.	10	.17

\*If fitted with spring contact, 4½ cents list additional. †If fitted with candelabra screw or bayonet candelabra bases, 10 cents list additional.

Customers are requested to order in unit package quantities to facilitate prompt deliveries.

‡All flashlight lamps listed above of 0.35 amperes may be supplied at 0.30 amperes without extra charge.

(a) Intended for two cells, case type dry battery.

(b) Intended for two cells, tubular type dry (c) Intended for three cells, case or tubular type dry battery. (d) Intended for five cells,

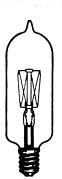


tubular type dry battery.

Type B-91/2



Type D-10





Type S-121/2



Type G-161/2

Mazda Decorative Lamps Mazda Class-Miniature Style-Candelabra and Decorative Types Regularly fitted with Unskirted Candelabra Screw Base

List				Type and	Diam.	Max. Over All		Unit		ice ach
No.	Description	Watts	Volts	Size Bulb	Bulb, Inches	Longth	Base	Pkg. Qty.	Clear	Frosted
400095	Candelabra Style B	15	105-125	B-9½	1 3	33/4	Candelabra Screw	5	\$0.73	\$0.80
400096	Candelabra Style D	15	105-125	D-10	11/4	3¾	Candelabra Screw	5	.73	.80
400097	Candelabra Style E	า์อี	105-125	T-8	1	33/4	Candelabra Screw	5	.73	.80
400098	Candelabra Style G	15	105-125	G-16½	216	31/8	Candelabra Screw	5	.73	.80
400099	Decorative Style F	15	105-125	S-12½	1 16	31/2	Candelabra Screw	. 5	.73	.80

Customers are requested to order in unit package quantities to facilitate prompt deliveries. Clear bulbs are shipped on orders unless otherwise specified. Digitized by GOOGLE

Prices on application. Incandescent Lamps

# Western Electric

# SUNBEAM INCANDESCENT LAMPS



G-6, 8 and 10 Sidelight Rear or Speedometer 3 Cell 6-8 Volta



G-12 and 16½ Headlight Mazda B 3 Cell 6-8 Volts



G-10, 12 and 161/2 Electric Vehicle



G-6, 8 and 16½ Rear. Side and Head Light 6 Cell 12-16 Volte



5, 10 and 40 Watt 16 Cell 28-32 Volta



50, 75 and 100 Watt 16 Cell 28-32 Volts

### MAZDA CLASS MINIATURE STYLE ROUND TYPE FOR AUTOMOBILE SERVICE

Lamps for 3 Cell (Lead Type) Storage Battery-Generator Lighting Systems (6-8 Volts)

		as Follow	n Lamps s	s per rical P.	Type and	Diam.	Maxi- mum	Unit	Std.	List
Description	Approx. Candle Power	Volts	Amperes	Watts Spher C. I	Size Bulb	Bulb Inches	Over all Length Inches	Pkg. Qnty.	Pkg. Qnty.	Price Clear
Rear and Speedometer (Series Burning)	} 2	3–4	.84	1.35	G- 6	3⁄4	13/8	10	100	\$0.31
Rear and Speedometer	<b>'</b> 2	6–8	.42	1.35	G- 6	3/4	13/8	10	100	.31
Side	12	6-8	.84	1.18	G-8	1	1 1 1 1 1	10	100	.31
Headlight (Mazda B).	12	6-8	2.00	. 95	G-12	11/2	21/2	5	100	.41
Headlight (Mazda B).	15	6–8	2.50	.95	G-16½	$2\frac{1}{16}$	31/8	5	100	.41
Lamana for 6 Call /	Tand To	> Sto	na ma Dat	C		- I ialas		/19	16 W-1	4-1

### Lamps for 6 Cell (Lead Type) Storage Battery-Generator Lighting Systems (12-16 Volts)

Rear and Speedometer (two in Series)	} 2	6–8	.42	1.35	G- 6	3/4	13/8	10	100	\$0.31
Rear and Speedometer	2	12-16	.26	1.35	G- 6	3/4	13/8	10	100	. 36
Side	4 ′	12-16	.42	1.18	G-8	1	11	10	100	.36
Headlight (Mazda B).	15	12-16	1.00	1.00	G-16½	$2\frac{1}{16}$	31/8	5	100	.45

# FOR ELECTRIC VEHICLE SERVICE Lamps for Use Upon Lead and Alkaline Type Electric Vehicle Storage Battery Circuits

Ratings A Lamps as		Watts per Spherical	Type and Size Bulb	Diameter Bulb	Maximum Over all Length	Unit Pkg.	Std. Pkg.	List Price
Watts	Volts.	C. P.	Olize Dulb	Inches	Inches	Qnty.	Qnty.	Clear
8 *15 *25	$   \left\{     \begin{array}{l}       30-34 \\       40-44 \\       60-64 \\       80-64     \end{array}   \right\} $	1.31 1.20 1.15	G-10 G-12 G-161/2	$ \begin{array}{c} 1\frac{1}{4} \\ 1\frac{1}{2} \\ 2\frac{1}{16} \end{array} $	21/4 21/2 31/8	10 5 5	100 100 100	\$0.90 .90 .90

Fitted with either bayonet candelabra single or double contact (Style 1100 or 1000) bases. supplied fitted with candelabra screw base (Style 500) without extra charge.

If fitted with medium screw base (Style 100) or with medium bayonet base (Style 800) 5 cents list additional.

### Mazda Class—Large Style—Straight Side and Pear Shape Types FOR COUNTRY HOME LIGHTING OUTFITS HAVING 16 CELL (LEAD TYPE) Storage Batteries-Generator Lighting System 16 Cell (20-32 Volts) Mazda B Lamps

Labeled Watts	Watts per Spherical	Type and Size	Diameter Bulb	Maximum Over all	Base Regularly	Std. Pkg.	List P	rice
Nominal	C. P.	Bulb	Inches	Length In.	Stripped	Qnty.	Clear	Frosted
5 10 20 40	· 1.44	8-14	$1\frac{3}{4}$ $2\frac{1}{8}$ $2\frac{1}{8}$ $2\frac{3}{8}$	4	Med. screw	100	\$0.54	\$0.60
10	1.37	S-17	$2\frac{1}{8}$	45/8	Med. screw	100	. 54	.60
20	1.29	8-17	21/8	45/8	Med. screw	100	.54	.60
40	1.24	S-19	23/8	$5\frac{1}{4}$	Med. screw	100	. 54	.60
े <b>क्का</b> स्ट्रिक	16 Cell (28-32 Volts) Mazda C Lamps							

75   .85   PS-22   2¾   6¾   Med. screw   50   1.50   1.0		10 Cell (20	-DE VOILE)	wazaa C zamp	•	
100 .80 PS-25   31/8   71/8   Med. screw   Digiti 24   1/2   2.20   2.3		2½ 2¾ 3½				\$1.40 1.60 2.30

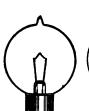
# Western Electric SUNBEAM INCANDESCENT LAMPS



Rear Light 9 Ceil 18-24 Volts



G-8 Side Light 3 Cell 6-8 Volts



G-12 Mazda C Headlight 3 Cell 6-8 Volts



Rear and Speedometer Light 3 Cell 6-8 Volts



G-10 Headlight Mazda B and Side Light (Focusing) 3 Cell 6-8 Volts

Headlight

Mazda B

12-16 Volts



G-12 Headlight Mazda B 6 Cell 12-16 Volts



G-12 Mazda C Headlight 9 Cell 18-24 Volts



G-8 Mazda C Headlight 3 Cell 6-8 Voits



G-8 Side Light 9 Cell 18-24 Volts

### MAZDA CLASS MINIATURE STYLE ROUND TYPE FOR AUTOMOBILE SERVICE

Lamps for 3 Cell (Lead Type) Storage Battery-Generator Lighting Systems (6-8 Volts)

		igs Appea ps as Fol		Watts	Type	Diam.	Maxi- mum	Unit	List
Description	Approx. Candle Power	Volts	Amperes	Spheri- cal C. P.	and Size Bulb	Bulb Inches	Over all Length Inches	Pkg. Qnty.	Price Clear
Rear and Speedometer	4	6-8	.84	1.35	G- 6	3/4	13/8	10	\$0.36
Side	6	6-8	1.25	1.18	G-8	1	111	10	.36
Headlight (Mazda B)	9	6-8	1.50	1.00	G-10	11/4	21/4	5	.41
Spotlight (Mazda B)	18	6-8	3	.95	G-12	11/2	21/2	5	.41
Headlight (Mazda B)	18	6-8	3	.95	G-12	11/2	21/2	5	.41
Headlight (Mazda B)	21	6-8	31/2	.95	G-16½	$2\frac{1}{16}$	31/8	5	.45

 Lamps for 6 Cell (Lead Type) Storage Battery-Generator Lighting Systems (12-16 Volts)

 Headlight (Mazda B)
 15
 12-16
 1.00
 1.00
 G-12
 1½
 2½
 5
 \$0.45

 Headlight (Mazda B)
 18 & 21
 12-16
 1½
 4½
 1½
 2½
 3½
 5
 45

Lamps for 9 Cell (Lead Type) Storage Battery-Generator Lighting Systems (18-24 Volts) Rear and Speedometer (two in 2 10 .26 1.35 3/4 G- 6 13/8 \$0.42 10 2 .17 13/8 18-24 1.35 Rear and Speedometer. G- 6 3/4 10 .53 18-24 1 11 16 3 1/8 Side. 4 26 1.18 G-8 10 .60 Headlight (Mazda B)..... 18 - 241.00 1.00 G-161/2 21 5 .75

Mazda C Lamps for 3, 6 and 9 Cell (Lead Type) Storage Battery-Generator Lighting Systems (6-8, 12-16 and 18-24 Volts Respectively)

Mazda C Headlight	12	1 6-8 1	11/2	1 .80	G- 8 1	1	1 17%	10	\$0.60
Mazda C Headlight	21	6-8	21/2	.80	G-12	11/2	21/2	5	.53
Mazda C Headlight	24	6-8	3	.80	G-12	11/2	21/2	- 5	.75
Mazda C Headlight	36	6-8	4	.80	G-161/6	21	31/8	5	1.13
Mazda C Headlight	24	12-16	11/2	.80	G-12	11/2	21/2	5	.56
Mazda C Headlight	40	12-16	2	.80	G-161/2	216	31/8	5	1.13
Mazda C Headlight	24	18-24	1	.80	G-12	11/2	21/2	5	1.13
Mazda C Headlight	12	6-8	11/2	.80	G-12	11/2	21/2	5	.60
Mazda C Spotlight	16	6-8	2	.80	G-10	11/4	21/4	10	.53
Mazda C Spotlight	20	12-16	1	.80	G-10	11/4	21/4	10	.56

Lamps for Magneto Type Lighting Systems†

A STATE OF THE STA					9	100			
†Mazda B Headlight (two in Series)	} 18	9	2	.90	G-16½	$2\frac{1}{16}$	31/8	5	\$0.41
†Mazda C Headlight (two in Series)	} 27	9	2	.72	G-12	11/2	21/2	5	.53

Can be supplied fitted with candelabra screw base (Style 500) without extra charge. Fitted with either bayonet candelabra single or double contact (Style 1100 or 1000) bases.

†The lamps are designed for use on 1915 Standard Magneto Type Lighting Systems. Customers are requested to order in unit package quantities to facilitate prompt deliveries. Prices on application.

# SUNBEAM INCANDESCENT LAMPS



(Sign Lamp)

S-14
2½ and 5 Watta
10½ and 12½ Volta
(Sign Lamp)

# Mazda Sign Lamps

The superiority of Mazda lamps for sign lighting is generally acknowledged. These lamps combine the desirable features of economy of operation and good light quality—both factors of importance in sign lighting.

### STRAIGHT SIDE--SIGN

			Wattsper		Bulb	Over All	Base Pkg.	Price	Each	
List No.	Voltage Class	·Size Lamp in Watts	Spherical C. P.	Туре	Diameter in Inches	Length Inches		Pkg.	Clear	Frosted
					i	1	1		ì	1
400076	113-123	21/2	1.52	S-14	13/4	4	Med. Screw	100	\$0.50	\$0.56
400077 400078	11½-12½ 55-65	5	1.46 1.73	S-14 S-14	134	4	Med. Screw Med. Screw	100 100	.50	.56
400378	110-125	10	1.73	Š-14	134	4	Med. Screw	100	54	.60

Standard package discounts on all large style Mazda lamps can be given only on orders for exact standard package quantities or multiples thereof. It is allowable, however, to combine in one standard package all sizes of large style Mazda lamps having the same standard package quantity. Such lamps may be of different voltages and finish of bulb.

# Luminous Radiator Heating Units

### Carbon Type Frosted

Fitted with Medium Screw Skirted Base. Always state exact operating voltage of circuit when ordering.

			В	ulb	Maximum	Std.	Deiter
List No.	Voltage	Total Watts	Туре	Diameter in Inches	Over All Length Inches Pkg. Qnty.	Price Each	
400222	100-130 100-130 200-250 73-83	250 500 250 500	T-21½ T-21½ T-21½	2 116 2 116 2 116 2 116 2 116 2 116	117/8 117/8 117/8 117/8	36 36 36 36	\$1.75 2.10 2.10 2.45

Orders for luminous radiator heating units in the above Schedule cannot be combined with orders for other types of Carbon lamps to determine the discounts on such other types of Carbon lamps.

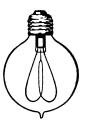
### SUNBEAM INCANDESCENT LAMPS



S-17 and 19 20, 30, 40, 50 and 60 Watts Gem Type



60 Mill Tppe Gem Type



G-25 50 Watts Gem Type



and 20



17 and 19 20, 30, 50 and 60 Watts 105-



-19 and 21 30, 35 and 60 Watts 220—250 Volts

### Gem Class Gem, Straight Side Type

Standard Medium Screw Base, 105 to 125 volts only

T:-A	Size of Efficiency		Bı		Max. Over		Std. Pkg.	‡Price	Each
List No.	Lamp in Watts	W.P.C.	Style	Diam. In.	All Length Inches	Base Regularly Shipped	Quantity Not less than	Clear	Frosted
400166	20	4.00	S-17	21/8	41/2	Med. Screw	200	\$0.40	\$0.45
400133	30	3.00	S-17	21/8	41/2	Med. Screw	200	.40	.45
400152	40	2.56	S-19	23/8	51/8	Med. Screw	200	.40	.45
400153	50	2.50	S-19	23/8	51/8	Med. Screw	200	.40	.45
400154	60	2.50	S-19	23/8	51/8	Med. Screw	200	.40	.45

### Gem Straight Side-Mill Type

Standard Medium Screw Base, 105 to 125 volts only.

400385	60	2.6	S-19	23/8	51/8	Med. Screw	200	\$0.40   \$0.45

### Round Gem

Standard Medium Screw Base, 105 to 125 volts only.

							•		
400386	50	2.5	*G-25	31/8	45%	Med. Screw	100	. 50	. 56

\*The 50 watt round bulb GEM lamp is regularly supplied in G-25 bulb, but can be supplied in G-18 $\frac{1}{2}$ bulb 3.0 W.P.C. (standard package quantity 200) at 50 cents clear and 55 cents frosted, but is not recommended.

Standard package discounts on all large style Gem lamps can be given only on orders for exact standard package quantities or multiples thereof. It is allowable, however, to combine in one standard package all sizes of large style Gem lamps having the same standard package quantity. Such lamps may be of different voltages and finish of bulb.

‡Lamps of voltages of 100 to 109 and 126 to 136 inclusive are not regularly carried in stock, but may be

obtained at the same list prices.

# Carbon, Large Style

Regular Type, 105-125 and 220-250 Volts Plain Lamps—Standard Medium Screw Base STRAIGHT SIDE

		Base	Size of			Bulb	Max.	I I	Price	Each	
List No.	Voltage	Supplied   Mad Serow	e Regularly Lampi	Lamp in Watts	Lamp in W.P.C		Diameter in Inches	Over All Length in Inches	1	Clear	Frosted
400121	105 (	Med. Screw	20	4.15	S-17	1 21/8	41/2	1 †200	\$0.32	\$0.37	
400123		Med. Screw	30	3.23	S-17	21/8	41/2	†200	.32	.37	
400124	to 125	Med. Screw	50	2.97	S-19	23/8	51/8	†200	.32	.37	
400125	120 (	Med. Screw	60	2.97	S-19	23/8	51/8	†200	.32	.37	
400128	220 to 1	Med. Screw	35	4.40	P-19	23/8	45/8	†200	.36	.41	
400129	250	Med. Screw	60	3.69	P-21	25/8	5	200	.36	.41	
STRAIGHT SIDE—SIGN											
400118	105 to f	Med. Screw	10	5.00	S-14	134	131/2	1 †200	\$0.32	\$0.37	
400119	125	Med. Screw	20	4.15	S-14	134	†31/2	†200	.32	.37	
400134	$\left  egin{array}{c} 220  ext{ to } \ 250 \end{array}  ight.  ight.  ight.$	Med. Screw	<b>3</b> 0	5.9	P-19	23/8	†45%	†200	36	.41	

†Standard shipping quantity of these lamps is 250.

Standard package discounts for lamps in the above schedule can be given only on orders for not less than a standard package quantity of one size or assorted sizes of bulbs. For any one size of bulb, lamps of different voltages, wattages and finish of bulb may be combined in one package by

### LAMP COLORINGS



### Semi-Weatherproof

Semi-Weatherproof is used where a coloring is desired to last several weeks outdoors or somewhat longer than the cheaper coloring indoors. The coloring will stand considerable rough usage without injury and can be removed readily with wood alcohol when desired. A transparent, hard, glossy coating that dries in a few minutes and made especially to stand the wear and tear of the elements for 60 or 90 days.

List No.		List Price Each	List Price per Doz.
400342	Semi-Weatherproof, ½ pint bottles	<b>\$2.50</b>	<b>\$22</b> .50
400343	Semi-Weatherproof, pint bottles		37.50
400344	Semi-Weatherproof, quart bottles		67.50

Furnished in ruby, blue, red, green moonlight, amber, pink, canary, purple, and white opal.

Note: A dipping cup is furnished with every ½ pint, 1 pint and quart bottle.

# Weatherproof

A clear incandescent lamp dipped in weatherproof coloring will outlive a natural colored lamp. It dries without current in 3 days.

List			List Price
No.		Each	per Doz.
400345	Weatherproof, 7 oz. cans	<b>\$3.40</b>	<b>\$33</b> .80
400346	Weatherproof, 15 oz. cans	5.30	56.40
400347	Weatherproof, 30 oz. cans	9.20	101.30

Furnished in red, blue, green, amber, canary, and white opal.

# **Indoor Coloring**

Indoor lamp coloring is especially adapted for indoor use; it is furnished in ruby, blue, red, green, amber, pink, canary, purple, white frosting, and moonlight blue.

List No.	•	Std. Pkg.	List Price per Doz.
400348	4 oz. bottles	144	\$8.80
400349	½ pint bottles	48	13.20
400350	Pint bottles	· 24	<b>2</b> 6.40
400351	Quart bottles	24	47.50

Note: A dipping cup is furnished with every ½ pint, 1 pint and quart bottle.

Delivery F. O. B. Factory, New York or Chicago. For warehouse deliveries write mearest house.

# **COLOR CAPS**

### Half and Full Cap



Color caps are used by all reliable sign manufacturers because they are absolutely the best method of coloring an electric sign. One equipment is the only expenditure as they do not fade or wear out.

Style "A" caps are usually preferable for large roof signs or permanent displays, as they produce the color effect by reflection without "killing" the light.

How to Use "A" Caps. Color face of letter or design same color as the caps to be used. Use gloss paint. As some bulbs are imperfect, turn caps around until they grip lamps firmly.

How to Use "B" Caps. These can be used, like colored lamps, on any color background. They are especially adaptable for frequent color changes or where a deep color is required. We recommend them for street decorating, window displays, fire exits, elevator signals, stage lighting effects, etc.

### STYLES "A" AND "B"



Size		Sta. Pkg.	Each
S-14	1¾ in., 4 c.p., also 2½, 5 and 10 watt lamp	100	\$0.60
S-17	21/8 in., 8 c.p., also 10, 15 and 20 watt lamp	50	.80
S-19	23% in., 16 c.p., also 25 and 40 watt lamp	25	.90
S-21	25% in., 32 c.p., also 60 watt lamp	25	1.10

### Instructions for Ordering

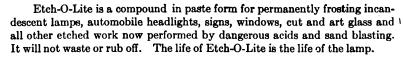
S-14 size fits standard  $1\frac{3}{4}$  inch diameter bulb, 4 c.p., also  $2\frac{1}{2}$ , 5,  $7\frac{1}{2}$  and 10 watt Mazda sign lamp.

S-17 size fits standard 21/8 inch diameter bulb, 8 c.p., also 10, 15 and 20 watt Mazda lamp.

S-19 size fits standard 23% inch diameter bulb, 16 c.p., also 25 and 40 watt Mazda lamp.

S-21 size fits standard 25% inch diameter bulb, 32 c.p., 60 watt Mazda lamp.

### Etch-O-Lite



Application. Thoroughly cleanse the article to be frosted. Dip into paste for five seconds, remove, allowing excess material to drip into container for two minutes. With finger or stick scrape material from lamp into can, wash and dry. 10 lbs. will frost 1200 to 1500 lamps. Put up in 5 and 10 lb. containers.

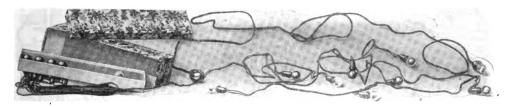
	containers.	
	†Lis	st Price
	5 lb. can Etch-O-Lite each	\$6.00
	10 lb. can Etch-O-Liteeach	11.00
r.	25 lb. can Etch-O-Liteper lb.	
	50 lb. can Etch-O-Liteper lb.	1.80
TIME		4.00
	Dipping machine to fit 1 gal. can	4.50
Triblian		

\*Delivery F. O. B. New York City. ‡Delivery F. O. B. Pittsburgh, Pa. For warehouse deliveries write nearest house; ed by



Etch-O-Lite Dipping Machine Incandescent Lamps

### CHRISTMAS TREE AND DECORATIVE OUTFITS



Series Type for Use on 100-120 V. Lighting Circuits-



# Christmas Tree Outfits

For Use on 32 V. House Lighting System

		List	List Price	List	List Price	List	List Price
Ligh	ts With Lamps	No.	Cotton Cord	No.	Silk Cord	No.	Cotton Cord
8	9, 1 in. round. 14 v.	*233	0 \$8.00	2301	\$9.00	2370	\$8.00
16	18, 1 in. round, 14 v.	*233	1 16.CO	2302	<b>18.00</b>	2371	16.00
24	27, 1 in. round, 14 v.	†2333	2 24.00	2303	27.00	2372	24.00
32	36, 1 in. round, 14 v.	233	3 32.00	2304	36.00	2373	32.00
8	Ex. Festoon, 9, 1 in.	١,		ll .		11	
	round, 14 v.	233	4 8.00	2305	9.00	2374	8.00
	m 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						

The above equipped with 8 foot leader, green composition sockets, porcelain junction boxes, and swivel attachment plugs. Lamps assorted colors.



Pear

# Battery Type, Multiple Burning

MERCERIZED, COTTON COVERED, TWISTED CORD Lamp Volts Branches Price ad 312 1 of 8 \$6.00 List No. Bulbs \*2325 8 light battery outfit complete less batteries. 1 in. round 2310 8 light storage battery outfit less batteries... 1 in. round 1 of 8 Lamps assorted colors.

Series Type Mazda Decorative Lamps

For 32 V., House Lighting, 8 Lamps in Series



For 100-120 V., 8 Lamp in Series

List List List List No. Color Style Price No. Color Style Price 01337 Clear 1 C.P., 4 v., G-8, 1 in. Price 01338 Red 1 C.P., 4 v., G-8, 1 in. on 01339 Blue 1 C.P., 4 v., G-8, 1 in. appli-01340 Green 1 C.P., 4 v., G-8, 1 in. cation 01315 Clear 3 C.P., 14 v., G-8, 1 in. \$0.36 01317 Red 3 C.P., 14 v., G-8, 1 in. 01318 Blue 3 C.P., 14 v., G-8, 1 in. 01319 Green 3 C.P., 14 v., G-8, 1 in. .40 .40 .40

Battery Type, Multiple Burning

For	Use or	n 3 Standard 6 In. Dry	Cells		For Use on	6 Volt Storage Batteries
045	Clear	1 C.P., 3½ v., G-8, 1 in.	<b>\$</b> 0.32	11	01332 Clear	2 C.P., 6 v., G-8, 1 in. Price
046	Red	$1 \text{ C.P.}$ , $3\frac{1}{2} \text{ v.}$ , G-8, 1 in.	. 36	- 11	01333 Red	2 C.P., 6 v., G-8, 1 in. on
048	Blue	$1 \text{ C.P.}$ , $3\frac{1}{2} \text{ v.}$ , G-8, 1 in.	. 36	Н	01334 Blue	2 C.P., 6 v., G-8, 1 in. appli- 2 C.P., 6 v., G-8, 1 in. cation
047	Green	$1 \text{ C.P.}, 3\frac{1}{2} \text{ v.}, \text{ G-8, 1 in.}$	.36	H	01335 Green	2 C.P., 6 v., G-8, 1 in. cation

Fancy Mazda Lamps 3 C. P. 14 Volts-Miniature Base I aree Fruit

Santa Claus

Sinai Huit			Large I ruit			
List No.	Li	st Price Each	List No.	List Price Each		
01401 01402 01403	PeachOrange	.70	01411	Banana		
01404	Apple	.70 .70 <b>Roseb</b>		Plum		



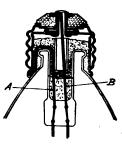
List	List Price	List	List Pr	ice	List	Li	st Price
No.	Each	No.	E	ach	No.	*	Each
01420 Red	\$0.80	01425	Red \$0.				
01421 Yellow	80	01426	Yellow	80	01431	Red	.80
01422 Pink	80	01427	Pink	.80	01432	Pink	.80
Birds			Animals			Figures	
01435 Canary	\$1.20	01440	Fish \$1.	00	01450	Santa Claus	\$1.00
01436 Blue Bird	1.20	01441	Lion 1.	.00	01451	Snowman	1.00
01437 Robin 01438 Chicken	1.20	01442	Frog 1.	.00	01452	Dutch Girl	1.00
01438 Chicken	1.20 l	01443	Cat 1.	.00	01453	Policeman	1.00
Fancy Mazda lamps are packed in holly paper boxes—10 lamps of one type to a box.							

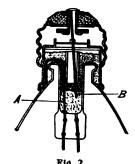
\*Standard package 100. †Standard package 50. ‡Standard package 25. Incandescent Lamps

### HUBBELL LOCKING LAMPS









# Hubbell Locking Lamps

Schedule "L"

The base of the Hubbell locking lamp consists of two parts: an outer, or rotating shell, and an inner shell cemented to the lamp.

The filament of the lamp is attached in the usual manner.

Figure 1 illustrates a cross-sectional view of lamp base ready for use, showing both the leading-in wires A and B soldered to the inner shell and to the center contact respectively.

A lamp equipped with the Hubbell locking base may be screwed into any standard Edison base socket, but cannot be removed therefrom by turning the lamp in the opposite direction.

Burned out or broken lamps may be removed by a slight downward pull of the lamp. This action will break the leading-in wire B, connecting the center contact to the lamp filament as shown in Figure 2.

In this lowered position the outer shell of lamp base engages a reverse ratchet and the lamp may then be unscrewed.

When the lamp is removed from the socket, the electrical connections are permanently destroyed and the lamp becomes valueless.

Hubbell locking lamps are absolute proof against removal, and have for their object the furnishing of a lamp which may be readily attached to a socket, but when in place cannot be detached, thereby preventing the improper removal or changing of lamps by unauthorized persons. They are especially recommended for public buildings, railway stations, hotels (where sockets are frequently used for heating devices) and many other places where it is not desired to remove the lamps except for replacement.

STRAIGHT SIDE-FITTED WITH MEDIUM SCREW BASE

	- D11041			THE WILD TOWN	DCICE W DA		
	Size of Lamp	Size and Type	Diameter	Overall Length	Standard Pack-		Price Each—
Volts	in Watts	of Bulb	in Inches	in Inches	age Quantity	Clear	Frosted
	( 10	S-17	$2\frac{1}{8}$	45/8	100	<b>\$</b> 1.07	<b>\$1</b> .15
	15	S-17	$2\frac{1}{8}$	45/8	100	1.07	1.15
105 4- 105	20	S-17	$2\frac{1}{8}$	45%	100	1.07	1.15
105 to 125	1 25	S-19	23%	51/4	100	1.07	1.15
	40	S-19	23/8	$5\frac{1}{4}$	100	1.07	1.15
	60	S-21	$\overline{2}$ 5%	51/2	100	1.33	1.44
	$\frac{25}{25}$	S-19	$\overline{2}_{8}$	51%	100	1.25	1.33
220 to 250	₹40	S-19	$\mathbf{\bar{2}^{3}}_{8}^{\circ}$	51%	100	1.25	1.33
10	. 60	S-21	$\overline{2}$ $\frac{5}{8}$	$57_{8}^{\circ}$	100	1.57	1.68
	STRAIGHT	SIDE (SIGN		WITH MED	IUM SCREW	BASE	
	1 21/2	S-14	13/4	4	100	\$1.01	\$1.09
10 to 13	{ 5 2	Š-14	13/4	$\bar{4}$	100	1.01	1.09
50 to 65	5	S-14	184	$\bar{4}$	100	1.07	1.15
105 to 125	10	Š-14	$1\frac{3}{4}$	$ar{4}$	100	1.07	1.15
	STRAIGHT	SIDE (B COII		D WITH ME	DIUM SCREW	BASE	
	(25	S-19	23/8	51/4	50	\$1.20	<b>\$</b> 1.33
105 to 125	{ 40	S-19	$ar{2}^{3}_{8}^{\circ}$	51/4	50	1.20	1.33
	60	S-21	$\frac{1}{2}\frac{5}{8}$	$51\frac{1}{2}$	50	1.47	. 1.60
	ROUN	ID BULB—FI			SCREW BASI	Ē	
	( 15	G-25	31/8	43/4	50	\$1.60	\$1.73
105 / 105	25	G-25	31/8	$4\frac{3}{4}$	50	1.60	1.73
105 to 125	140	G-25	31%	434	50	1.60	1.73
	60	G-30	$3\frac{3}{4}$		<b>24</b>	2.14	2.32
000 / 050	25	G-25	31/8	$\frac{5\frac{1}{2}}{4\frac{3}{4}}$	50	1.87	2.00
220 to 250	140	G-25	31/8	434	50	1.87	2.00
Inatmina	liana fan andanis	a lamna:	, 0				

Instructions for ordering lamps:

In order to facilitate the work of our office and to avoid misinterpretation of orders, we would request that customers mention the following facts on each order:

1. Quantity (number of lamps desired).

2. Size of lamps (in watts, whether 40 watts, 60 watts, etc.).

Circuit voltage (voltage at the lamp socket).
 Style and size of bulb (for example, S-19-G-25, etc.).

5. Finish of bulb (clear, bowl frosted or all frosted).

All lamps—medium screw only. Delivery F. O. B. Factory, Bridgeport, Conn. For warehouse deliveries write nearest house.

### TURN DOWN LAMPS

### AND

## Interchangeable Sectional Unit Signs









Sign Letter Unit Showing Glass Slide and Interior Detail

# Mazda and Carbon Lamps LARGE STYLE TURN DOWN TYPE

These lamps are for use in standard sockets. They are with one or more filaments designed to give two or more combinations of candle power at the same voltage.

Economical and Hylo Lamp. Filled with medium screw type of turn down bases, with either pull string or turn pull style. Hylo pull string type of base, 2 cents net extra.

### MAZDA LAMPS

Watts	Candle Power	Voltage	Std. Pkg.	List Price Each
25	20 x 1.2	. 110–125	. 100	\$1.45
40	33 x 1.2	110–125	100	1.45

### CARBON LAMPS

Candle Power	Voltage	Std. Pkg.	List Price Each
8 x ½	105-125	200	\$0.90
16 x 1	105-125	200	.90
32 x 1	105-125	200	1.10
8 x ½	220-250	200	1.00
16 x 1	220-250	200	1.00

For frosting or coloring carbon lamps the following net additional charges are made, for lamp frosted or superficial colored 5 cents; natural colored glass, all colors, 25 per cent.

# Patterson Interchangeable Sectional Unit Signs

### For Show Window and Other Interior Advertising

As good a day sign as could be desired, although primarily an electric night sign; colored letters by simply dipping lamps; flashing by connecting to flasher.

Brush brass finish channel bases. Channel is furnished in any length.

Patterson electric signs are double faced, i.e., with provision for two glass slides in each unit so sign may be read from two sides.

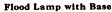
List No.	Description Li	st Price Each
70530	Patterson interchangeable sectional unit letter, complete with one reflector, glass from porcelain base with connection clips and receptacle, one 7½ or 10 watt Mazda sign la (as specified)	mp
70531	Extra glass front of cameo black and white glass (letters, figures, dollar signs, etc.)	75
70532 70533	Attachment-spacer (only one needed to a one-line sign)	1.00
70534 70535	Mazda 7½ watt lamps.  Brush brass channel, per foot.	

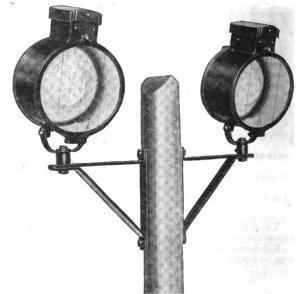
Allow 3 1/4 inches for each letter, 21/2 inches for each attachment spacer, each word spacer and each end of line spacer.

Always state voltage of circuits on which signs are to be used.

# Western Electric Western Electric DAVIS FLOOD LIGHTS







Flood Lamp with Brackets

# Western Electric Davis Flood Lights

The Western Electric Davis Flood Lights are designed for use with 750 watt or 1000 watt Type C Mazda Lamps and they are supplied with reflectors of a special design which diffuse the light over large areas. This is the style lamp used for lighting yards of industrial plants, drill grounds, bathing beaches

and other work where it is advantageous to have a powerful light distributed evenly over a large area.

If so ordered the Western Electric Davis Flood Lamps can be supplied with a searchlight type of reflector. This reflector concentrates the light into a solid and powerful beam. Flood lamps with this style of reflector

are used on boats and for other work in place of arc searchlights.

Reflectors. The reflectors are of glass, silver plated and treated with heavy heat resisting backing. This construction completely eliminates cracking or splitting due to the high temperature generated by the 1000 watt lamp

outside and exposed work the cast iron case is recommended, as it resists corrosion better than steel, but the latter may be used equally as well if coated frequently with waterproof paint. The case is hinged for opening both front and rear. Ample ventilation is provided by ducts in the chimney.

Glass and Holder. The front glass and holder are hinged from the bottom and held by a machine screw at the top. Glass is made of wire-glass for protection in case of breakage, and is in four sections to admit of expansion and contraction.

Lamp. The Marda lamp is fortened in a recent of the contraction. Cases. The cases are furnished either of steel or cast iron. Both are heavily black enameled. For

provided for locking lamp in desired position.

Lamp. The Mazda lamp is fastened in a receptacle in the top of the lamp and hangs in a vertical position. Easy adjustment of focus is made by turning adjustment screw in the back of the chimney.

Portable Type. The portable type is mounted on a 3½ foot heavy pipe standard, with an 18 inch round base, which is amply large to give stability. It may be left portable or can be bolted to any flat surface by four bolts, for which holes are provided in the outer rim of the base.

Bracket Type. For pole mounting the bracket type is recommended. This is the same light as the portable but is supplied with a triangular bracket for mounting on poles or trees.

Both portable and bracket types are arranged for vertical and horizontal adjustment. Set screws are

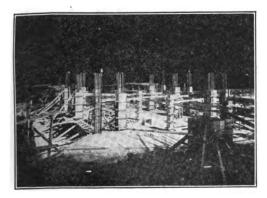
Both portable and bracket types are arranged for vertical and horizontal adjustment. Set screws are

	Weight	Packed	
List	Portable	Bracket	List Price
No.	$T_{Y}pe$	Type	Each
410439	Western Electric Davis Flood Light, steel case, without lamp bulb	72	<b>\$100.00</b>
410440	Western Electric Davis Flood Light, cast iron case, without lamp bulb 96	95	100.00
410441	1000 watt Mazda type lamp bulb, P. S. 52, regular, clear, 105 to 125 volts.		14.00
Dal	irrows F. O. P. Footowic Chicago, III. For wonth augo delivronica musica magnet house		

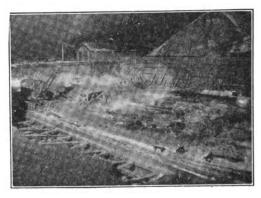
Delivery F. O. B. Factory, Chicago, Ill. For warehouse deliveries write nearest house. Specify when ordering whether portable or bracket type is desired.

# DAVIS FLOOD LAMPS

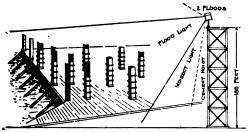
The following illustrations show typical installations of the Western Electric Davis Flood Lights. Beneath each illustration is a diagram showing how the lamps were mounted. These illustrations are reproductions of actual un-retouched photographs taken at night by the light of the installation shown in each.



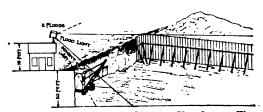
Night Construction By Two Flood Lights



Night Excavation By Two Flood Lights



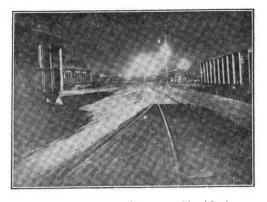
Night Construction Diagram, Showing How Lamps Are Mounted. Area 200 x 150 Feet



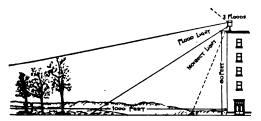
Night Excavation Diagram Showing How Lampe Were Mounted Area 250 x 300 Feet



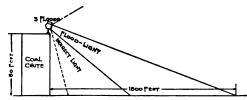
Lighting Pig Iron Pile By One Flood Light



Railroad Yard Lighted by Three Flood Lights

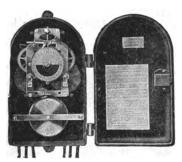


Pig Iron Pile Diagram Showing How Lamps Were Mounted. Area 1000 x 200 Feet



Railroad Yard Diagram Showing How Lampe Were Mounted Area 1800 x 300 Feet

### METAL CASE TIME SWITCHES





Door Open

### Hartford Time Switches

This is a device by which electric current is automatically turned on and off at such times as desired

with no further attention than the weekly winding.

It consists of a high-grade Seth Thomas marine clock movement, and a Standard Switch, so arranged that each in its operation is independent of the other. This permits of perfect regulation of the clock and assures accuracy of operation.

The switching mechanism is positive in operation; in the lower capacity-switches, it being a high-

grade rotary switch, and in the larger capacity, a high-grade standard knife switch.

The mechanism is enclosed in a dust and weatherproof japanned iron case supplied with a Sub-Treasury lock and rubber gasketted door.

### STANDARD TYPES

Type "B"—Throws the current on and off once each day, seven days per week.

Type "C"—The same as type "B," excepting that it automatically disconnects the switch one day each week, designed to omit Sunday operation.

Type "D"—Similar to type "B," but arranged to throw light on and off two periods each day (this type requires winding twice a week).

Type "E"—Two rate meter service control.

Type "G"—Designed to control apartment house lighting.

All switches are provided with hand trip, by which the switch can be tripped independently by hand, and are also, with the exception of Type "C," equipped with a cut-out, permitting the disconnecting of the clock and switch, without stopping the clock.

Dimension—The enclosing cast-iron case up to 50 amperes, Double Pole, measures approximately 12 inches high, 7½ inches wide, 3½ inches deep.

### SMALL TYPE

### For use on circuits up to 250 V.—A. C. or D. C.

		List Price	B Lach	
Description	Туре В	Type C & D	Type E	Type G
10 Amperes Single Pole	<b>\$38.40</b>	<b>\$41.60</b>	\$40.00	<b>\$43</b> .20
10 Amperes Double Pole	<b>38.40</b>	41.60		<b>43</b> .20
10 Amperes Triple Pole	40.00	43.20		
20 Amperes Single Pole	40.00	43.20	41.60	
20 Amperes Double Pole	40.00	43.20		
20 Amperes Triple Pole	41.60	44.80		
35 Amperes Single Pole	41.60	44.80	43.20	<b>67.2</b> 0
35 Amperes Double Pole	41.60	44.80		<b>67.2</b> 0
35 Amperes Triple Pole	43.20	46.40		
50 Amperes Single Pole	46.40	49.60		
50 Amperes Double Pole	46.40	49.60	••••	

### LARGE TYPE

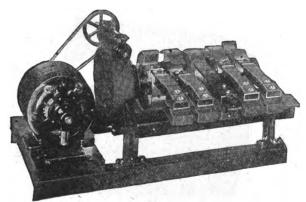
### For use on circuits up to 250 V.—A. C. or D. C.

	——List P	rice Each—
Description	Туре В	Type C & D
50 Amperes Triple Pole		\$89.60
100 Amperes Single Pole	91. <b>20</b>	94.40
100 Amperes Double Pole	91.20	94.40
100 Amperes Triple Pole	96.00	100.80
200 Amperes Single Pole	100.80	105.60
200 Amperes Double Pole	100.80	105.60
200 Amperes Triple Pole	110.40	115.20
AT		

Note: When ordering specify type by letter.

Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

### B AND B ELECTRIC SIGN FLASHERS



No. 4 HHS

# Betts No. 4 Heavy Highspeed Type

This flasher will produce revolving wheels, turning borders, flames, dust, smoke, running water, waving flag,\*\* etc. Usually wired in four circuits on a multiple of four, viz.: 1, 2, 3, 4—1, 2, 3, 4, etc. All the 1s on one circuit, 2s on the second circuit, 3s on the third circuit and 4s on the fourth circuit.

### CAPACITY-PER SWITCH 110-120 VOLTS, 330 WATTS-10-13 VOLTS, 150 WATTS

					-List Prices	
List	No. of	Size	Shpg.	With	With	Steel
No.	Switches	Inches	Wgt., Lbs.	D.C. Motor	A.C. Motor	Cabinet
4HS	4	11 x 12 x 15	70	<b>\$</b> 52.00	<b>\$</b> 56.00	\$8.54
Ad	d \$2.68 for each	additional switch.				

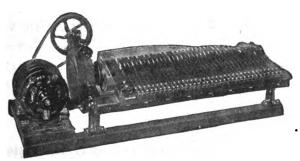
### CAPACITY-PER SWITCH 100-120 VOLTS, 660 WATTS-10-13 VOLTS, 300 WATTS

4HHS 4 11 x 12 x 19 80 \$62.66

**\$**66.68 **\$9.92** 

Add \$3.34 list for each additional switch.

\*\* For flags it is preferable to order a special flag flasher at slight additional cost. The effect is much better.



No. 35 Script

# Betts No. 35 Script Type

For writing on a word one or more lamps at a time, skyrockets, shooting stars, fireworks, etc.

### CAPACITY-PER SWITCH 100-120 VOLTS, 110 WATTS-10-13 VOLTS, 50 WATTS

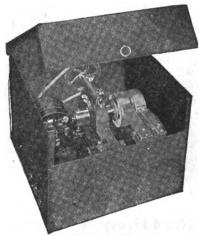
					List Prices	
List	No. of	Size	Shpg.	With	With	Steel
No.	Switches	Inches	Wgt., Lbs.	D.C. Motor	A.C. Motor	Cabinet
20-S	20	11 x 12 x 22	90	\$70.66	<b>\$74.66</b>	\$10.34

Add \$1.00 list for each additional switch.

Note: Carrying capacity of 220 volts 50% less. Add on for 220 volts motors: D. C., \$2.68; A.C., \$2.68. A.C. motors are 60 cycle. For 25 to 50 cycles, add \$8.00. An extra charge of \$5.34 per switch is made for 3 pole machines.

\* Delivery F. O. B. Factory, New York, N. Y. For warehouse deliveries write nearest house.

# B AND B ELECTRIC SIGN FLASHERS



No 151 With Cabinet

# Betts Sign Flashers

These flashers are made to produce any known flashing effect. Every contact is equipped with an interchangeable contact sector, permitting time adjustments or complete flashing changes. These sectors, in connection with the interchangeable brush holders, make it comparatively easy to completely rebuild the flasher for different effects. Guaranteed two years and approved by the National Board of Fire Underwriters.

# Betts On and Off or Spelling Type

These machines are used to flash one or more circuits, such as, a whole sign on and off, varied color effects, spelling a word, etc.

### CAPACITY-1 TO 550 WATTS PER SWITCH AT 110 VOLTS

				*List Prices		
List	No. of	Size	Shpg.	With	With	Steel
No.	Switches	Inches	Wgt., Lbs.	D.C. Motor	A.C. Motor	Cabinet
51	1	11 x 12 x 14	60	<b>\$44.00</b>	<b>\$4</b> 8.00	\$8.14
<b>52</b>	2	11 x 12 x 14	60	46.66	<b>50</b> .66	8.14

Add \$2.66 list for each additional switch.

### CAPACITY-550 TO 1100 WATTS PER SWITCH AT 110 VOLTS

101	1	11 x 12 x 14	64	<b>\$4</b> 8.00	<b>\$</b> 52.00	<b>\$</b> 8.14
102	2	<b>V1 x 12 x 15</b>	65	52.00	56.00	8.14

Add \$4.00 list for each additional switch.

### CAPACITY-1101 TO 1620 WATTS PER SWITCH AT 110 VOLTS

151	1	11 x 12 x 14	64	<b>\$</b> 52.00	<b>\$</b> 56.00	\$8.14
152	2	11 x 12 x 15	65	57.34	61.34	8.54

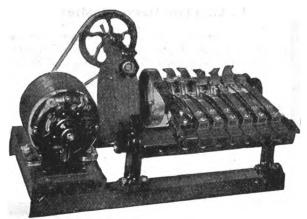
Add \$5.34 list for each additional switch.

Do not allow more than 15 amperes (1650 watts) at 110-220 volts for any one switch. Heavier loads should be divided among two or more switches. Where several switches are used there is an extra charge for feeders, etc.

<sup>\*</sup> Delivery F. O. B. Factory, New York, N. Y. For warehouse deliveries write nearest house.

Theatrical and Lighting Specialties 24-2

### **ELECTRIC SIGN FLASHERS**



No. 6 Lightning Type

### Betts No. 6 Lightning Type

The number of circuits required depends upon the number and length of sections in the stroke.

#### CAPACITY-PER SWITCH 330 WATTS, 3 AMPERES-150 WATTS, 15 AMPERES

List No.	No. of Switches	Size Inches	Shpg. Wgt., Lbs.	With D.C. Motor	With A.C. Motor	Steel Cabinet
4-L	4	11 x 12 x 15	70	\$52.00	<b>\$5</b> 6.00	<b>\$</b> 8. <b>54</b>
	Add \$2.68 list for each	additional switch.				

### Betts No. 12 Snake Chaser Type

This type is used for producing "crawling snakes," chasing rats, jumping rabbits, and similar effects. The number of circuits should be a multiple of the number of snakes or objects employed, viz.: 60 lamps, 3 snakes would require 20 circuits. Wire accordingly.

#### CAPACITY—PER SWITCH 220 WATTS, 3 AMPERES—100 WATTS, 15 AMPERES

				,	—-*List Prices——	
List	No. of	Size	Shpg.	With	With	Steel
No.	Switches	Inches	Wgt., Lbs.	D.C. Motor	A.C. Motor	Cabinet
10-SC	15	11 x 12 x 18	80	\$68.00	\$72.00	<b>\$9.60</b>
		1 11.1				

Add \$1.34 list for each additional switch.

### Waving Flag Type

#### CAPACITY-PER SWITCH 330 WATTS, 3 AMPERES-150 WATTS, 15 AMPERES

					List Prices	
List	No. of	Size	Shpg.	With	With	Steel
No.	Switches	Inches	Wgt., Lbs.	D.C. Motor	A.C. Motor	Cabinet
4-WF	4	11 x 12 x 15	70	\$58.70	<b>\$</b> 62.60	<b>\$</b> 9. <b>9</b> 2

Add \$2.68 list for each additional switch.

#### INSTRUCTIONS FOR ORDERING

- 1st. Number and candle power of lamps to be controlled by each switch.
- Whether Mazda (Tungsten) or carbon lamps.
- 3d. If Mazda (Tungsten) lamps whether they are to be used on low voltage transformers
- 4th. If direct or alternating current. If alternating, the frequency (number of cycles).
- 5th. If two- or three-wire system.
- 6th. Voltage.
- 7th. If design is complicated, give complete description of the sign, and preferably a sketch showing number of lamps for circuit and how they are to be liashed.

  8th. Shipments: express or freight.
  - \*Delivery F. O. B. Factory, New York, N. Y. For warehouse deliveries write nearest house.

List Price

### **RECO SIGN FLASHERS**

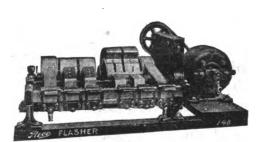
### L. C. Type Reco Flasher



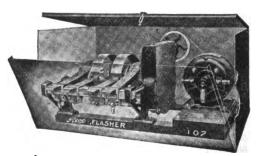
Completely equipped with steel cabinet. For small signs, transparencies, on and off, alternate sides, one or two color effects and show window lighting effects. Made to flash on and off on alternating circuits only.

List No. 410436	Mfr. No. LC-2- 6	No. of Switches	Capacity Per Switch 6 amp.	Dimensions Inches 15 x 15 x 10	Weight Lbs. 40 43	With A. C. Motor and Cabinet \$51.20 54.40
410437	LC-2-10	2	10 amp.	15 x 15 x 10	43	<b>34.40</b>

Type L. C. Reco Flasher



On and Off Type Without Cabinet



On and Off Type With Cabinet

### Reco On and Off Type

For flashing signs on and off alternate sides, two or three color effects, etc. Has adjustable contacts. Minor or complete changes in flashing effects can be easily made.

#### Capacity, 6 Amperes per Switch, 110 Volts

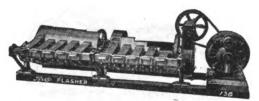
					*	List Price Each-	
List	Mfr.	No. of		Shipping	With D. C.	With A. C.	Steel Cabinet
No.	No.	Switches	Size	Weight	Motor	Motor	Only
410321	B1-6	1	13 x 13 x 11 ins.	45 lbs.	\$48.00	<b>\$54.40</b>	\$7.20
410322	B2-6	2	15 x 13 x 11 ins.	48 lbs.	51.20	57.60	7.20
. Add	\$3.20 lis	st for each	additional switch.				
			Capacity, 10 Ampe	res per Switc	h, 110 Volts		
410323	B1-10	1	15 x 13 x 11 ins.	48 lbs.	\$51.20	\$57.60	\$7.20
410324	B2-10	2	17 x 13 x 11 ins.	51 lbs.	56.00	62.40	7.20
Add	\$6.40 lis	st for each	additional switch.				
			Capacity, 15 Ampe	res per Switc	h, 110 Volts		
410325	B1-15	1	15 x 13 x 11 ins.	48 lbs.	<b>\$</b> 54.40	\$60.80	\$7.20
410326	B2-15	$ar{f 2}$	17 x 13 x 11 ins.	51 lbs.	60.80	67.20	7.20
Add	\$6.40 li	st for each	additional switch.				

Note: When ordering, specify how sign is to flash, number of changes desired (the number of flasher switches is governed by the number of changes), number of lamps in each change (the size of switch is governed by the ampere load), if two or three wire service, if D.C., the voltage; if A.C., the voltage and cycles.

If above are furnished for 3 wire service add \$3.20 to list.

Delivery F. O. B. Factory, Chicago, Ill. For warehouse deliveries write nearest house. Theatrical and Lighting Specialties

### SIGN FLASHERS



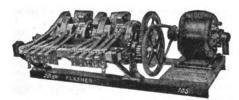
[Spelling Type

### Reco Spelling Type

This type spells out a sign letter by letter, then all out, then all on as one and out and repeat, or for flashing one line at a time, growing vines, sunburst, etc. They are furnished in four sizes.

#### Capacity, 3 Amperes per Switch, 110 Volts

						*List Price Each-	
List	Mft.	No. of		Shipping	With .	With	Steel Cabinet
No.	No.	Switches	Size	Weight	D. C. Motor	A. C. Motor	Only
410327	4-3	4	16 x 13 x 11 ins.	40 lbs.	\$49.60	\$56.00	<b>\$7.2</b> 0
410328	5-3	5	17 x 13 x 11 ins.	43 lbs.	52.00	58.40	7.20
Add	\$2.40 list	for each a	dditional switch.				
		•	Capacity, 5 Ampe	res per Swi	tch, 110 Volts		
410329	4-5	4	17 x 13 x 11 ins.	40 lbs.	\$57.60	\$64.00	\$7.20
410330	5-5	4 5	$18 \times 13 \times 11 \text{ ins.}$	43 lbs.	60.80	67.20	7.20
410331	6-5	6	$19 \times 13 \times 11$ ins.	46 lbs.	64.00	70.40	7.20
Add	\$3.20 list	for each	dditional switch.				
			Capacity, 8 Ampe	res per Sw	itch, 110 Volts		
410332	B4-8	4	19 x 13 x 11 ins.	50 lbs.	\$61.60	\$68.00	\$8.00
410333	B5-8	5	$21 \times 13 \times 11$ ins.	55 lbs.	65.60	72.00	8.00
Add :	\$4.00 list	for each a	dditional switch.				



Speed Type

### Reco Speed Type

These flashers are for spectacular and motion effects, producing running borders, flames, revolving wheels and globes, dust, rain, steam, smoke, fountain, running water or liquid effects. They are made in three sizes and approved by the National Board of Fire Underwriters.

#### Capacity, 4 Amperes per Switch, 110 Volts

						*List Price Each-	
List	Mfr.	No. of		Shipping	With	With	Steel Cabinet
No.	No.	Switches	Size	Weight	D. C. Motor	A. C. Motor	Only
410336	4-4	4	17 x 13 x 11 ins.	40 lbs.	\$57.60	<b>\$</b> 64.00	\$7.20
410337	8-4	8	$24 \times 13 \times 11 \text{ ins.}$	50 lbs.	67.20	73.60	8.80
Add	\$3.20 list f	or each a	dditional switch.				
			Capacity, 8 Ampe	res per Swi	itch, 110 Volts		
410340	84-8	4	21 x 13 x 11 ins.	55 lbs.	\$70.40	\$76.80	\$8.80
410341	S8-8	8	$31 \times 13 \times 11$ ins.	65 lbs.	86.40	92.80	10.40

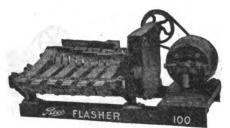
Add \$4.80 list for each additional switch.

NOTE: When ordering, specify how sign is to flash, number of changes desired (the number of flasher switches is governed by the number of changes), number of lamps in each change (the size of switch is governed by the ampere load), if two or three wire service, if D.C., the voltage, if A.C., the voltage and cycles.

If above are furnished for 3-wire service add \$3.20 to list.

\*Delivery F. O. B. Factory, Chicago, Ill. For warehouse deliveries write nearest house.

# Western Electric SIGN FLASHERS



Lightning Type

Reco Lightning Type

These flashers give the effect of streaks of lightning in signs, displays, etc. Lightning effects are wired each streak on a separate circuit; thus a three section lightning streak requires a three switch flasher, etc. They are furnished in two sizes.

Capacity, 5 Amperes per Switch, 110 Volts

				<del></del>	-*List Price Each	
List	No. of		Shipping	With	With	Steel Cabinet
No.	Switches	Size	Weight	D. C. Motor	A. C. Motor	Only
L3-5	3	$16 \times 13 \times 11 \text{ ins.}$	40 lbs.	<b>\$</b> 53.60	<b>\$60.00</b>	<b>\$7.20</b>
L4-5	4	$17 \times 13 \times 11$ ins.	43 lbs.	56.00	<b>62.40</b>	<b>7</b> .20
A &	14 <b>63</b> 50 1im	for each additional ar	rritah			



Script Type

Reco Script Type

Invisible handwriting effects in script letter signs, perfectly reproduced, also used in rockets, vines, trailers, etc. Built single, double or triple deck to meet space requirements.

Approved by the National Board of Fire Underwriters.

Capacity, 1 Ampere per Switch, 110 Volts

					LIST Price Laco	
List	No. of		Shipping	With	With	Steel Cabinet
No.	Switches	Size	Weight	D. C. Motor	A. C. Motor	Only
10-1	10	20 x 13 x 11 ins.	60 lbs.	<b>\$68</b> .00	<b>\$74.40</b>	<b>\$9.60</b>
20-1	20	$28 \times 13 \times 11 \text{ ins.}$	68 lbs.	80.00	86.40	11. <b>2</b> 0
A	dd <b>\$1</b> .20 list	t for each additional s	witch.			

If above are furnished for 3-wire service add \$3.20 to list.



Chaser Type

Reco Chaser Type

The type of flasher used for "crawling snakes," jumping rabbits, etc., wherever one animate object chases another around the border of a sign. This illusion is accomplished by wiring each opposite lamp in the sign on one wire, making half the number of circuits as there are lamps in the border.

Capacity, 1½ Amperes per Switch, 110 Volts

					-•List Price Each	
List	No. of		Shipping	With	With	Steel Cabinet
No.	Switches	Size	Weight	D. C. Motor	A. C. Motor	Only
15-11/2	15	26 x 13 x 11 ins.	63 lbs.	<b>\$76</b> .80	\$83.20	<b>\$</b> 8. <b>8</b> 0
20-13/2	20	$29 \times 13 \times 11 \text{ ins.}$	. 68 lbs.	84.80	91.20	9.60

Add \$1.60 list for each additional switch.

NOTE: When ordering, specify how sign is to flash, number of changes desired (the number of flasher switches is governed by the number of changes), number of lamps in each change (the size of switch is governed by the ampere load), if two or three wire service, if D.C., the voltage; if A.C., the voltage and cycles.

If above are furnished for 3-wire service add \$3.20 to list.

Delivery F. O. B. Factory, Chicago, Ill. For warehouse deliveries write nearest house.

### B. & B. AUTOMATIC FLASHERS







No. 005P Wynk-A-Lyte Flushing Plug



No. 005V Vertical "Baby" Thermo-Wynk



No. 0152 Thermo-Wynk-Tu-Way Size 2½ x 3½ x 9½ Inches

### Automatic Motorless Thermo-Wynks

No. 005R Receptacle "Baby." For 20 to 60 watts. Adapted for small window transparencies. No. 005P Wynk-A-Lyte Flashing Plug. Operates on a 20, 25, 40 or 60 watt lamp on 50 to 200 volts inclusive. Can be adjusted without removing from socket and is compensated for temperature changes. No. 005 Vertical "Baby" was brought out for use where it is impractical to install other types.

List		Capacity	Watts	List Price		Capacity	Watts	List Price
No.	Volts	per Circuit	per Circuit	Each	Volts	per Circuit	per Circuit	Each
005R	110	⅓ amp.	60	\$1.62	220	1/4 amp.	60	\$1.90
005P	110	⅓ amp.	60	1.80	220	1/4 amp.	60	1.80
005 V	110	⅓ amp.	60	1.36	220	¼ amp.	60	1.62

### Thermo-Wynk-Tu-Way

The Tu-Way will flash two lamps or two circuits of lamps alternately, one set remaining lighted while the other is out, and so on. It is useful for flashing colored sets of lamps alternately, for switching two portions of a sign, for illusion where the face lights up through the back of the sign, etc.

List		Capacity	Watts	List Price		Capacity	Watts	List Price
No.	Volts	per Circuit	per Circuit	Each	Volts	per Circuit	per Circuit	Each
0052	110	⅓ amp.	60	<b>\$</b> 19.6 <b>2</b>	220	¼ amp.	60	\$21.60
0152	110	1½ amp.	165	22.24	220	¾ amp.	165	25.20



No. 030 Thermo-Wynk



Vacu Type

### Automatic Motorless Thermo-Wynks

Nos. 005 "Baby," 015, 020 and 030 Flashers are wound with special resistance wire, and Nos. 020 and 030 have a spark eliminator. Like the Vacu Type, Thermo-Wynks are compensating and will work in zero weather the same as in a temperature of 100 degrees F.

List	Length		Capacity		List Price		Capacity		List Price
No.	Ins.	Volts	Amps.	Watts	. Each	Volts	Amps.	Watts	Each
005 "Baby"	2	110	1/2	60	\$1.36	220	1/4	60	\$1.62
010		110	1	110	1.80	220	1,2	110	2.26
015	6	110	11/2	. 165	2.70	220	34	165.	3.16
020	31/2	110	2	220	7.20	220	1	220	9.00
030	6	110	3,	330	9.00	220	$1\frac{1}{2}$	330	10.80

#### Vacu Type

An instantaneous breaking, single or double circuit, will operate on direct or alternating currents.

					List P	rices
List	Capacity				Single	Double
No.	per Circuit	Watts	Volts	Size	Circuit	Circuit
5V	5 amps.	550	110	3 x 6 1/2 x 13 1/4	\$34.66	\$36.00
10V	10 amps.	1100	110	$3 \times 6\frac{1}{2} \times 13\frac{1}{2}$	37.34	38.66
15V	15 amps.	1650	110	$3 \times 6^{14} \times 13^{14}$	44.00	45.34
20 V	20 amps.	2200	. 110	$3 \times 6\frac{1}{2} \times 13\frac{1}{2}$	46.66	48.00
201	ao amps.	2200	. 110	0 2 0 72 2 10 73	10.00	40.00

The Vacu Type prices are based on 110 volts. If used on 220 volts, reduce rating 50 per cent. and add \$1.33 each to the single circuit, and \$2.66 to double circuit.

Delivery F. O. B. Factory, New York, N. Y. For warehouse deliveries write mearest house.

### "NEWGARD" RECEPTACLES AND GUARDS









Type B 'Bracket Type



Type C Flange Type



Wire Guard



Portable Lamp Guard

### Combined Receptacle and Waterproof Globe

This receptacle is made entirely of non-absorbing and non-corrosive material, and will last indefinitely in any climate.

#### Style A. Pendant Type

The pendant type hangs suspended by its conducting wires. Unless otherwise specified 8 inch wires are provided.

List			Quantity	Wt. Lbs.	List Price	*List Price
No.		Watts	per case	per case	Each	per Dzo.
4337	Ed. base pendant type	40 or 60	60	110,	\$2.00	\$19.80
4337X	Ed. base pendant type		30	100	4.00.	39.60

#### Style B. Bracket Type

The bracket type cover is threaded to screw on regular ½ inch iron gas pipe or conduit.

List			Quantity	Wt. Lbs.	List Price	*List Price
No.		Watts	per case	per case	Each	per Doz.
4347	Ed. base, bracket type	40 or 60	60	140	<b>\$2.35</b>	<b>\$23.76</b>
4347X	Ed. base, bracket type	100	30	120	4.25	43.56

#### Style C. Flange Type

The flange type cover is flanged and can be screwed to wall, 31/4 Rd. outlet box, ceiling or other support.

	· · ·		_	•	-	• •
List			Quantity	Wt. Lbs.	List Price	*List Price
No.	•	Watts	per case	per case	Each	per Doz.
4349	Ed. base, flange type	40 or 60	60	140	<b>\$</b> 2.45	\$25.08
4349X	Ed. base, flange type	100	30	120	4.35	44.88

#### Separate Parts for Receptacles

	For 40 Wat	t Size		1		For 60 to 100	Watt	8	
			List	*List				List	*List
List		Std.	Price	Price	List		Std.	Price	Price
No.		Pkg.	Each	per Doz.	No.		Pkg.	Each	per Doz.
19043	Caps	60	<b>\$</b> 0.90	\$9.00	19043X	Caps	3Ŏ	\$1.80	\$18.00
19041	Clear globes	60	1.10	11.00	19041X	Clear globes	30	2.20	<b>22.00</b>
19044	B iron fittings	60	.65	6.00	19044X	B iron fittings	60	.65	6.00
19045	C iron fittings	60	.75	7.00	19045X	C iron fittings	60	.75	7.00
4350	Rubber gaskets	60	.42	4.00	4350X	Rubber gaskets	30	.84	8.00
19042	Genuine colored			11	19042X	Genuine colored			
	globes	60	2.10	21.12		globes	30	4.55	47.52

### "Newgard" Wire Guard

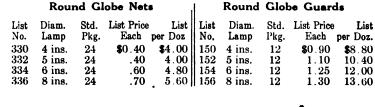
Fits tightly over globe and is secured at top.

List No.		Std. Pkg.	List Price Each	*List Price per Doz.
	7771 1.4 40			F
4351	Wire guard for 40 watt size	60	\$1.10	\$11.00
4351X	Wire guard for 60 to 100 watt size	30	1.80	18.00
*De	livery F. O. B. Factory, Chicago, Ill. Forwarehouse deliveries write	neares	thouse. C	

### **NETS AND GUARDS**



No. 330



### Inner Globe Nets



List			List Price				List Price	
No.	700 800	PKg.	Each	Per Doz.	NO.	Fine	Each per	

### Morse Street Lamp Guards

#### Made of Galvanized Steel Wire

Lamp can be renewed without detaching guard by opening bottom of cover.

List No.	Size, Ins.	Std. Lis Pkg. 1	st Price Each	e List per Doz.	List No.	Size, Ins.	Std. Pkg.	List Price Each	e List per Doz.
121	13½ x 11 15 x 11	6 \$	4.50	\$48.00	125	17 x 11	6	<b>\$</b> 6.30	\$67.20



No. 121

### **Outer Globe Nets**

		Coa	rse				Fin	•	•
List No. 310 314	Size 12 ins. 14 ins.	Pkg.	Each	e List per Doz. \$6.40 8.00	No.	Size	Pkg.	List Price Each \$1.20 1.50	per Doz.



### Silver Luster Finish

List		Std.	List Pric	e List	List		Std.	List Price	List
No.	Size, Ins.	Pkg.	Each	per Doz.	No.	Size, Ins.	Pkg.	Each p	er Doz.
91	6 or 7 x 2	24	<b>\$</b> 0.35	\$3.16	96	$12 \times 3\frac{1}{2}$	24	<b>\$</b> 0.70	\$7.00
93	8 x 2 <sup>1</sup> / <sub>2</sub> 10 x 3	24	.40	3.60	97	15 x 4	24	, 1.60	16.20
95	$10 \times 3$	24	.45	4.20	98	18 x 5	24	2.45	<b>27</b> .00



No. 91

### Webster Cluster Guard

#### With Hinge, etc., Screw Eye Bolts or Clamps

Heavy

Light

		_							
List No.	Diam.	Std. Pkg.	List Price Each	List per Doz.	List No.	Diam.		List Price Each	List per Doz.
182	12 ins.	6	<b>\$</b> 2.15	\$22.40	183	12 ins.	6	<b>\$</b> 3.00	<b>\$33</b> .60
184	14 ins.	6	2.40	25.60	185	14 ins.	6	3.60	38.40
186	16 ins.	6	2.70	28.80	187	16 ins.	6	4.00	43.20
188	18 ins.	6	2.95	32.00	189	18 ins.	6	4.50	48.00
190	20 ins.	6	3.20	35.20	191	20 ins.	6	4.90	52.80
192	22 ins.	6	3.75	41.60	193	22 ins.	6	5.75	62.40
194	24 ins.	6	4.50	48.00		24 ins.		6,50	72.00
	74					ightiug	Fixtu	es and Ac	cessories



No. 182

### **HUBBELL LAMP GUARDS**

Every joint of the Hubbell lamp guards is electrically welded through and through. No solder or tie wires, spring catches, clamps or other devices are used. This method of welding insures strength and durability. They are made entirely of heavy steel wire.





No. 5485 For Standard Sockets

### For Standard Sockets

Schedule "E"

List No.	Size	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List per 100	W. E. List Price per Doz.
5691 <sup>4</sup>	For 15-25-40-60 watt Tungsten lamps	12	150	42	\$29.50	\$5.05
5692 <sup>4</sup>	For 75 Type C.	12	150	52	32.25	5.50
For Weatherproof Sockets Schedule "E"						
5693▲	For 15-25-40-60 watt Tungsten lamps, short base	12	150	42	\$29.50	\$5.05
5694▲	For 75 Type C	12	150	52	32.25	5.50
For Standard Sockets Schedule "E"						
5485▲	For 15-25-40-60 watt Tungsten lamps	12	150	45	\$31.50	\$5.30
5487▲	For 75 Type C	12	150	50	34.25	5.75





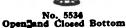
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### For Standard Sockets

List No.	Size		Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List per 100	W. E. List Price per Doz.
5573 <sup>4</sup> 5578 <sup>4</sup>	For 15-25-40-60 watt Tungsten lamps	15 15	150 150	60 85	\$34.00 38.75	\$5.30 5.75
5766▲	For 15-25-40-60 watt Tungsten lamps, short base, half reflector attached	15	150	65	48.00	8.15

### HUBBELL LAMP GUARDS







No. 5634 Tubular Lamp Guard

For Use with Hubbell Reflector

Open Bottom Guards				Schedule "E"		
List No.	Size	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	per 100	W. E. List Price per Doz.
5534 <sup>▲</sup> 5536 <sup>▲</sup>	For 15, 25, 40 and 60 watt Tungsten lamps	12 12 •	150 150	45 52	\$31.50 34.25	\$5.30 6.00

Open bottom guards can be used with either flat or cone type tin reflectors.

Closed Bottom Guards					Scheau	e E
<b>##</b> 92 <b></b>	For 15, 25, 40 and 60 watt Tungsten lamps	1 12	1 150	1 70	1.38.73 1	0.00
Close	d bottom guards can be used with flat tin reflectors	only.	The ab	ove pri	ces do not	include

Tubular Lamp Guard Schedule "E" 5634 1 25 watt tubular lamp guard 12 | 15 doz. | 20 | \$34.00 | \$5.30







For Weatherproof Sockets



No. 5764 With Half Reflector

Locking Guards Schedule "E" For Standard Sockets W. E. Pkg. Wt. Mfrs. Std. Carton List List List Price Size Quantity Pkg. No. Lbs. per 100 per Doz. For 15, 25, 40 and 60 watt Tungsten

For 75 Type C

150 and 250 watt lamp for standard socket 53 \$43.75 \$7.45 12 gross 56854 55.0012 85 9.35 gross 56354 60 120 112.00 9.36 6410 For Weatherproof Sockets \$7.45 gross 5780\* 85 55.00 9.35 12 1 gross 57314 120 112.00 9.36 60 6411 For Weatherproof Socket No. 60666 \$43.75 \$7.45 For 15, 25, 40 and 60 watt Tungsten lamps...... For 75 Type C.... gross 53 <u> 5810^</u> 9.35 12 83 **55.00** 1 gross 58184 For Long Base Tungsten Lamp For 100 Type B, 100-200 Type C Tungsten lamp 5762 1 gross 65 \$72.50 \$12.00 for standard socket. 65 72.50 12.00 For 100 Type B, 100-200 Type C..... 12 1 gross For Standard Sockets with Half Reflector \$58.25 \$9.85 For Weatherproof Sockets with Half Reflector \$9.85 enal Electrical Code Standard.

#### MATTHEWS LAMP SPECIALTIES







For G. E. Split Socket

For Porcelain Socket

### Matthews Holdfast Lamp Guards

The rigid construction of the Matthews Holdfast Lamp Guard makes it a desirable protective device for incandescent lamp bulbs. The guard clamps directly on the socket, removing all possibility of strain on the bulb. In addition, a patented spring spiral cushion shock absorber in the center of the guard takes up any jar to which the lamp may be subjected. A patented trap-lock is used to close the bottom opening and lock in the lamp. Will fit all locking Sockets.

#### Guards for Protecting 6, 8, 10, and 16 C. P. Carbon and 15, 25 and 40 Watt Mazda Lamps

	Size of	
List	Wire	Per
No.	B. W. G.	Doz.
*117 *114	17 14	\$3.84 4.80
*112	12	5.93
Guards for Protecting 32 C. P. Carbon and 40 and 60 Watt N		
*317	-	<b>\$</b> 4.80
*314	17	4.95
Guard for Protecting 50 C. P. Carbon, 75 and 100 Watt Type C Pe		
*514	•	<b>\$</b> 5.93
Guard for Protecting 200 Watt Type C Pear Shaped Mazda Lamps a Straight Side Mazda Lamps		Old Style
*714	14	<b>\$</b> 11.95
Guard for Protecting 150 Watt Old Style Straight Side Ma	zda Lamps	
*814	14	\$12.72
Guard for Protecting 300, 400 and 500 Watt Type C Pear Shaped Ma or Weatherproof Mogul Sockets	zda Lamps, v	with Brass
914—14 b. w. g		\$14.58
Guard for Protecting 750 and 1000 Watt Type C Pear Shaped Mazda Weatherproof Mogul Sockets	Lamps, with	Brass or
1014—14 b. w. g.		17.20
All guards will be furnished with a trap to prevent the unauthorized removal of lamps	<b>I</b> .	
List Prices for Extra Trap-locks for Renewal Purpor	ses	
Traps	16	<b>\$</b> 0.40
*The letter "B" should be added after the trade number if guards for brass letters "WP" if wanted for weatherproof sockets.	sockets are desir	red, and the
Prices are the same for brass or weatherproof socket guards. Collars for brass sockets 13 proof socket guards 13/2 inches diameter.	inches diameter;	for weather-
Matthews From Laws Chamman		

### Matthews Easy Lamp Changers

List	I	ist Price
No.		Each
1	For 2 and 4 C.P. Sign Lamps and lamps up to 5 watts.	\$5.00
2	For 6, 8, 10 and 16 C.P. Lamps and lamps from 5 watts to 60 watts	5.00
3	For 32 to 50 C. P. Carbon Lamps and 100 to 150 watt Mazda Lamps	6.00
	No poles are furnished.	

### LAMP GUARDS











Protector "H" Protector "A"
Lamp Guard
Lamp Guard

Loxon Reflector Guard

### "Loxon" Lamp Guard

Protects against loss by breakage, by fire caused by the breakage of lamps or by lamps coming in contact with inflammable material.

Lamp Guard

List		List Price	List Price
No.		Each	per doz.
1425	For 25-60 watt-110 volt with standard socket	<b>\$</b> 0.65	\$6.00
1426	For 40-60 watt—220 volt with standard socket	.68	6.30
1427	For 25-60 watt-110 volt with W. P. socket	.65	6.00
1428	For 40-60 watt-220 volt with W. P. socket	.68	6.30

NOTE: 1 key with every dozen guards. Extra keys, 10 cents each, net, 80 cents per dozen.

### "Loxon" Reflector Lamp Guards

Can be used among machinery parts where reflected light is needed. A substantial combination guard and reflector.

List		List Price	List Price
No.		Each	per doz.
1442 1443 1 <b>444</b>	For 15 watt, standard brass socket	.83	\$7.50 8.00 8.00

### Protector "O" Lamp Guard

	List No.		List Price Each	List Price per doz.
•	1429 1430 1432 1434	For 40 watt lamp, standard socket.  For 60 watt lamp, standard socket.  For 40 watt lamp, weatherproof socket.  For 60 watt lamp, weatherproof socket.	.47 .42	\$3.50 4.00 3.50 4.00

### Protector "H" Lamp Guard

List			List Price
No.		Each	per doz.
1431	For 40 watt lamp, standard socket	\$0.40	<b>\$3.20</b>
1433	For 60 watt lamp, standard socket	. <b>42</b>	3.50
2532	For 40 watt lamp, weatherproof socket	. 40	3.20
2533	For 60 watt lamp, weatherproof socket	.42	3.50

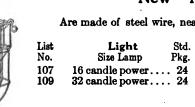
### Protector "A" Lamp Guard

List		List Price	
No.	For 15 watt lamp only	Each	per doz.
1441	For 15 watt lamp only	\$0.25	<b>\$2</b> .00

### MORSE LAMP GUARDS

### New "Never-Break" Guards

Are made of steel wire, neat and attractive, with silver luster finish.



List No.	<b>Light</b> Size Lamp	Std. Pkg.	W. E. List per Doz.	List No.			W. E. List per Doz.
107 109	16 candle power 32 candle power		\$3.60	111	16 candle power 32 candle power	24	\$5.40 7.20
109	32 candle power	24	4.50	119	32 candle power	24	1.20

### Standard Self-locking Guards

#### With Cushion

For Brass Sockets				For	Weatherproof	Soc	kets
List No. C D	Std. Pkg. 16 candle power 24 32 candle power 24	W. E. List per Doz. \$3.60 4.06	No. G	16 d 32 d	candle power	Std. Pkg. . 24 . 24	W. E. List per Doz. \$3.60 4.06



### Open Bottom Guards

#### With Cushion Ring

#### For Brass Sockets

			FOr Drass	500	WG C S	
List No.	Light Size Lemp	Std. Pkg.	W. E. List	List No.	<b>Heavy</b> Sto Size Lamp Pkg	
161 162	16 candle power 32 candle power		\$4.50 5.40	163 164	16 candle power 24 32 candle power 24	\$6.30 \$8.10
		For	Weather	proo	f Sockets	
165	16 candle power		\$4.50    5.40	167	16 candle power 24	



### Weatherproof Socket Guard

List No.	<b>Light</b> Size <b>Lam</b> p	W. E. List per Doz.		Heavy Size Lamp	Std. Pkg.	W. E. List per Doz.
5 6	16 candle power 32 candle power	\$3.60 4.50	7 8	16 candle power 32 candle power		\$5.40 7.20

No. 5

### Combination Reflector and Guard

#### For Brass Sockets

List No.	Light Size Lamp	W. E. List per Doz.			td. kg.	W. E. List per Doz.
13 14	16 candle power 32 candle power	\$5.60 7.20	15 16	16 candle power 1 32 candle power 1		\$7.20 9.60

#### For Weatherproof Sockets

No. 13 17 16 candle power.... 12 \$5.60 | 19 16 candle power.... 12 \$7.20 Lighting Pixtures and Accessories 68

### PORTABLE LAMP GUARDS

### Crescent Portable Guards



Ar hard us	e espe	cially ad Strong,	apted for use where a light and convenient.	portable wi	ll receive included.
List No.	Ü	O,	J		W. E. List Each
140.					Lacn
4645	For	40 watt	lamp		\$2.00
4676	For	60 watt	lamp		2.20

### Monitor Portable Lamp Guards

A substantial open-bottom portable guard.



E PAPIL	A Comment of	
	•	

List No.			_	_			E. List Each
1453	For	40 watt	lamp.	 	 	. 1	1.20
1454	For	60 watt	lamp.	 	 	•	1.30

### **Bulldog Portable Lamp Guards** For 60 Watt Lamp

Are copper-plated on Bessemer steel. Standard key socket securely imbedded in handle, giving the lamp a firm, rigid base. Will take any size cord.



List No.		W. E. List Each
4675	Complete with key socket imbedded in handle.	\$2.50
2590	Complete with keyless socket imbedded in handle	2.50

### Loxon Portable Lamp Guards For 40 Watt Lamp



Are made with ebonized handle and Loxon guard attached. Furnished both in plain wire guard and with half guard reflector. Key Socket Included.

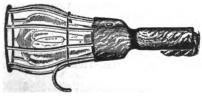
List No.		W. E. List Each
1447 1448	Key Socket, without reflector	\$1.50



### Standard Portable Lamp Guards

A substantial guard for heavy service made with Bessemer steel rods and stamped metal rings, copper-plated, with mica weatherproof socket, firmly imbedded in handle.

List		W. E. List
No.		Each
4672	Complete for 40 watt lamp	<b>\$2.50</b>
4673	Complete for 60 watt lamp	2.70



**National Portable** 

### National Portable Lamp Guards

Are of heavy construction with open bottom, made of steel heavily tinned, with mica weatherproof socket, firmly imbedded in handle.

List			W. E. List
No.			Each
1451	Complete for 4	0 watt lamp	\$2.00
1452	Complete for 6	0 watt lamp	2.20
	71	0 watt lamp. O O O O O O O O O O O O O O O O O O O	Accessories

### LAMP GUARDS



No. 2000 Cable Rack Portable

Cable Rack Portable Lamp Guard

A very handsome portable with black enamel handle. The cage portion of this portable is half guard
and half reflector so as to direct the reflected light where it is needed. The handle is equipped with a hook. This portable is designed principally for use around telephone switchboards. Furnished with key or keyless socket securely embedded in handle giving a firm and rigid base. Takes a 60 watt 110 volt Mazda lamp. Cage and reflector portion heavy tinned finish. List No.

2000 2001

No. 3001 Safety Vaporproof Portable Guard

This guard is just what its name describes, and is designed to meet the requirements of the garage or wherever gases or inflammable materials may be used. A heavy steel frame, strong handle, handy grip hook, and vaporproof receptacle make this the best vaporproof guard on the market. Takes a 25 watt standard Mazda lamp. Heavy tinned finish.









No. 1439 Style C

No. 1437 Style B No. 4000 Dreadnaught Portable Lamp Guard

A very strong portable guard made of Bessemer steel built to withstand hard usage and can be recommended to give unusual service. Has a porcelain keyless socket fitted with spring contact firmly embedded in handle. Takes a 60 watt lamp. Metal part copper plated finish. Made only in one size and finish. List No. List Price Each 4000

Dreadnaught Portable Lamp Guard.

Style C Wall Guard and Outlet Box Cover Combined

A device for which there is a demand in every theater, warehouse or outside platform, wherever a stationary outlet box socket is in use. Very strongly constructed of Bessemer steel wire ribs, stamped rings and plate or cover which will fit either a 3 or 4 inch outlet box and will take standard outlet box receptacles. The plate or box cover forms the lower part of the guard itself forming a combined cover and guard. It reduces the contractors stock as only one device takes the place of different size covers and guards. Heavy tinned finish. Diameter 31/3 inches, depth 5 1/3 inches.

1439 Style C Wall Guard Outlet Box Cover Combined...

Style B Wall Guard

For use in theaters, docks, warehouses and outdoor work where a stationary socket is used. Very strongly constructed of Bessemer steel wire ribs and stamped rings. Has a removable base ring which is attached to the wall. Key hole slots in base ring make them easy to attach and detach. Copper plated finish. Diameter 31/8 inches, depth 61/8 inches. Style B Wall Guard . . . . 1437

#### No. 1440-D Wall Guard

This device is the same as above excepting that it is fitted ith a trap or cover which is equipped with a key locking arrangement, thus preventing theft of lamps as well as breakage. Heavy tinned finish. Diameter 

Delivery F. O. B. Factory, Valparaiso, Ind. For warehouse deliveries write nearest house. 70-2 Lighting Fixtures and Accessories

# MARINE OR STEAMTIGHT FIXTURES With Screw Globes







No. 405

All of the following have a heavy brass base, flat brass wire guard. Screw globe scats on rubber gasket.



No. 404

#### CONDUIT TYPE

	WALL DIGITIES III					
404	90° bracket for 40 watt lamp. With iron junction box	\$7.22				
1404	90° bracket for 100 watt lamp. With iron junction hox	9.98				
434	90° key bracket for 40 watt lamp. With iron junction box	9 66				
1434	90° key bracket for 100 watt lamp. With iron junction box	13 38				
438	45° bracket for 40 watt lamp. With iron junction box	7.22				
1438	45° bracket for 100 watt lamp. With iron junction box	9.34				
439	45° key bracket for 40 watt lamp. With iron junction box	9.66				
1439	45° key bracket for 100 watt lamp. With iron junction box	12.74				
Press junction have sen he furnished for above						

Brass junction boxes can be furnished for above.



No. 416



No. 1470



No. 470



No. 372



No. 467

List No.	BULKHEAD TYPE	List Price Each
416 414	Brass fixture on wood base with full basket guard	\$9 56 8 48
	CEILING TYPE	
415 1415	Similar to No. 405, without junction box For 40 watt lamp For 100 watt lamp	\$4.00 6.12
	BATTERY ROOM TYPE	
6	Heavy porcelain base. With screw globe	\$2.94
	WATERTIGHT CEILING FIXTURES (2014)	
E	Ieavy cast brass base, with frosted screw globe, seats on gasket. Gland nuts for wire.	
1470 1471 372 471 470 467	For 8 inch diameter globe. Without guard For 6 inch diameter globe. Without guard Spun brass base for 8 inch diameter globe and gland outlets. Spun brass base with fancy band. 8 inch diameter frosted globe.	\$18.88 14.16 12.38 8.26 8.84 18.88
D	Delivery F. O. B. New York City. For warehouse deliveries write nearest housegitized by COSIC	
	00 takatua 1914 a 1914	

### MARINE FIXTURES AND PORTABLES







No. 1527



No. 1600

	CONDUIT TYPE	List Price
List No.		Each
1525 465 522 397 357 360 1622 1626 1630	For 2 inch diameter ball lamp, brass base and guard  For 25 watt lamp, brass base and guard  For 60 watt lamp, iron base, brass guard  For 100 watt lamp, iron base, brass guard  For 150 watt lamp, iron base, brass guard  For 250 watt lamp, iron base, brass guard  For 60 watt lamp, with switch, iron base, brass guard  For 100 watt lamp, with switch, iron base, brass guard  For 100 watt lamp, with switch, iron base, brass guard  For 150 watt lamp, with switch, iron base, brass guard	. 4.88 . 5.30 . 7.42 . 9.56 . 10.10 . 7.96 . 10.10
	JUNCTION BOX TYPE	
1527 1464 524 398 358 361 1650 1654 1658	For 2 inch diameter ball lamp, brass base and guard For 25 watt lamp, iron box, brass guard For 60 watt lamp, iron box, brass guard For 100 watt lamp, iron box, brass guard For 150 watt lamp, iron box, brass guard For 250 watt lamp, iron box, brass guard For 60 watt lamp, iron box, brass guard For 100 watt lamp, with switch, iron junction box, brass guard For 100 watt lamp, with switch, iron junction box, brass guard For 150 watt lamp, with switch, iron junction box, brass guard	3.82 5.30 7.42 9.56 10.10 7.96
	BRACKET TYPE	
1600 1671 1675 1679 1683 1687 1691	For 25 watt lamp, iron junction box and fixture base, brass gooseneck and guard For 60 watt lamp, iron junction box and fixture base, brass gooseneck and guard For 100 watt lamp, iron junction box and fixture base, brass gooseneck and guard For 150 watt lamp, iron junction box and fixture base, brass gooseneck and guard For 250 watt lamp, iron junction box and fixture base, brass gooseneck and guard For 60 watt lamp, with switch, iron box and fixture base, brass gooseneck and guard For 100 watt lamp, with switch, iron box and fixture base, brass gooseneck and guard For 150 watt lamp, with switch, iron box and fixture base, brass gooseneck and guard For 150 watt lamp, with switch, iron box and fixture base, brass gooseneck and guard above fixtures and boxes can be furnished in brass.	. 8.28 . 11.46 . 13.58 . 14.12 . 10.94 . 14.12



No. 422



No. 477



No. 473





No. 517



No. 445



No. 446

### Hand Portables

List No.		ist Price Each
422	Cast brass base, flat brass wire guard, with screw globe, hard wood handle, with stuffing nut. For 40 watt	
519	lamp.  Cast brass base, round wire guard, with screw globe, hard wood handle, with stuffing nut. For 40 watt lamp.  Cast brass base, round wire guard, with flared lip globe, hard wood handle, with stuffing nut. For 60 watt	
517	Cast brass base, round wire guard, with flared lip globe, hard wood handle, with stuffing nut. For 60 watt lamp.  Diving lamp, suitable for 100 watt lamp. Designed for continued submersion	10.62
477 445	Diving lamp, suitable for 100 watt lamp. Designed for continued submersion  Bunghole lamp, takes 16 C.P. lamp. 1½ inch maximum diameter of portable. Designed for continued submersion.	23.60 9.44
	NON-WATERTIGHT	
473 474 427 446 Deli	Extra strong, galvanized steel guard, for 40 or 60 watt lamp.  Brass base with brass round wire guard, 40 watt.  Brass base with flat brass guard. Key socket 40 watt.  Spun brass base, with tinned steel wire guard with key socket. Suitable for 25 watt lamp	\$4.72 5.30 4.12 2.36

### PLUG CLUSTERS

### Western Electric TWO-WAY PLUG



Two-way Plus

## Western Electric Two-way Plug

The Western Electric Two-way Plug is a neat and small attachment which is screwed into any lamp socket just as an ordinary lamp is put into that socket. The plug itself has two sockets so that where it is used you have two ordinary sockets where you had only one before. This permits you to have two lights from the original socket at the same time, or you can have one light and then use the other socket for a toaster, electric sewing machine, vacuum cleaner, washing machine, fan, or in fact for any of the modern electric household helps that every house needs. There is no need to lose a light when you sew, wash, clean or cook. By simply screwing into the one socket, the Two-way Plug you immediately have the use of two sockets which overcomes the difficulty of inadequate outlets. The two-way socket is an extra socket without extra wiring.

List No.		Std. Pkg.	Wt. Lbs.	Retail Price		List Price Carton of 10
92	Two-way multiple plug	10	4	\$1.00	<b>\$</b> 2.00	\$13.00

### Benjamin Plug Clusters

#### Schedule 1

Benjamin Plug Clusters are a recognized convenience for home and office use. They convert the single outlet into two, making it possible to retain the lamp, at the same time attach portable devices such as curling iron, chafing dish, sewing machine, fan, flatiron, or any of the numerous electrically controlled office appliances.

List No.	Description	Std. Pkg.	Weight Lbs.	Mfrs. List Each	W. E. `List Each
$92\frac{1}{2}$	2 light series cluster	10	4	\$1.30	\$1.95
93	3 light multiple cluster	10	6	1,60	2.40
94	4 light multiple cluster	<b>10</b> aitiz	ed by 6 O	OI.00	1.50
	- 40	Digitiz	00.0,		

### BENJAMIN CLUSTER BODIES







Type 1K-Dlam. 4 Inches List No. 16K



Type 5-Diam. 4 Inches List No. 56



Type 5K-Diam. 4 Inches List No. 55K

### Multiple Wireless Type

Schedule 1

Type K has three wire connection, furnishing three degrees of illumination when connected to proper switches. The bottom outlet affords a convenient connection for attachment plug. Types 1 and 1K require no insulating joint when No. 14 approved wire is used. Prices include flange tapped for  $\frac{3}{8}$  inch iron pipe. Standard finish is brush brass. Aluminum metal shell may be ordered with Types 1 and 1K without change in price.

TYPE 1 CLUSTER					TYPE 5 CLUSTER						
			Pkg.	Mfrs.	W. E.	l		Pkg.	Mfrs.	W. E	
List		No. of	Wt.	List	List	List	No. of	Wt.	List	Lis	
No.	Description	Lights	Lbs.	Each	Each	No.	Lights	Lbs.	Each	Each	3
12	With bottom bushing	2	12	<b>\$</b> 1.60	\$2.24	52▲	Ž	6	<b>\$1</b> .60	\$2.24	ŀ
13	With bottom bushing	3	12	1.85	2.60	53▲	3	6	1.85	2.60	)
14	With bottom bushing	4	12	2.10	2.94	54▲	4	6	2.10	2.94	Ī
15	With bottom bushing	5	12	2.35	3.30	55▲		6	2.35	3.30	)
16	With bottom bushing	6	12	2.60	3.64	56▲	6	7	2.60	3.64	ŀ
	TYPE 1	K CLU	JSTER				TYPE	5K	CLUSTER		•
13K	With bottom outlet	3	12	<b>\$</b> 1.85	\$2.60	53K	3	6	<b>\$1</b> .8 <b>5</b>	\$2.60	)
14K	With bottom outlet	4	12	2.10	2.94	54K	4	6	2.10	2.94	ı
15K	With bottom outlet	5	12	2.35	3.30	55K	5	6	2.35	3.30	)
16K	With bottom outlet	6	12	2.60	3.64	56K	6	6	2.60	3.64	1
17K	With bottom outlet	7	12	2.85	4.00	57K	7	7	2.85	4.00	)
13 14 15 16 13K 14K 15K 15K	With bottom bushing With bottom bushing With bottom bushing  TYPE 1 With bottom outlet With bottom outlet With bottom outlet With bottom outlet	5 6 I <b>K CLU</b> 3 4 5	12 12 12 12 12 USTER 12 12 12 12	1.85 2.10 2.35 2.60 \$1.85 2.10 2.35 2.60	2.60 2.94 3.30 3.64 \$2.60 2.94 3.30 3.64	54 <sup>4</sup> 55 <sup>4</sup> 56 <sup>4</sup> 53K 54K 55K 56K	3 4 5 6 <b>TYPE</b> 3 4 5 6	6 6 6 7 5 <b>5K</b> 6 6 6	1.85 2.10 2.35 2.60 CLUSTER \$1.85 2.10 2.35 2.60	2. 2. 3. 3. 3.	60 94 30 64 30 64

Types 1 and 1K have three supporting screw holes equally spaced on a circle of  $3\frac{1}{16}$  inches diameter. Types 5 and 5K have two supporting screw holes spaced  $1\frac{3}{4}$  inches on centers.



Type 18—Diam. 3 Inches. List No. 19



Type 8—Diam. 21/2 Inches. List No. 82



Type 2-Diam. 3 Inches. List No. 23



Type 7—Diam. 4 Inches. List No. 76

### Benjamin Wireless Type

Schedule 1

Types 8 and 2 are similar to Type 1, but of smaller diameter. Type 7 is the same as Type 1, with the addition of a snap switch. It is therefore specially useful for low ceilings, making the installation of wall switches unnecessary. Type 18 is designed for the lighting of side walls, and as receptacle for extension cord. In connection with No. 2450 shade holders, any standard 2½ inch shade may be used. Except for Nos. 18 and 19, prices include flange tapped for 3/8 inch iron pipe. Standard finish is brush brass.

	TYP	E 18			ı	TYP	E 8		
			Mfrs.	W. E.	1			Mfrs.	W. E.
List		Weight	List	List	List		Weight	List	List
No.		Lbs.	Each	Each	No.		Lbs.	Each	Each
18	1 light, 2½ ins	4	<b>\$</b> 0.50	\$0.70	82	2 light	5	\$1.00	\$1.40
19	2 light, 3 ins	6	.90	1.26	1				
					l	TYP	E 7		
	TYP	E 2			72	2 light	14	<b>\$2.60</b>	\$3.64
22	2 light	7	\$1.35	\$1.90	73	3 light		2.85	4.00
23	3 light	7	1.60	2.24	74	4 light		3.10	4.34
24	4 light		1.85	2.60	75	5 light		3.35	4.70
	<b>9</b>				76	6 light		3.60	5.04

Types 18, 8 and 2 have two supporting screw holes spaced  $1\frac{3}{4}$  inches on centers. Type 7 has three supporting screw holes equally spaced on a circle  $3\frac{5}{16}$  inches in diameter. Standard package 10

Standard package 10.

\*National Electrical Code Standard.

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### BENJAMIN CLUSTER BODIES



Type 3—Diam. 3¾ ins. Socket Angle 16° No. 32



Type'3T—Diam. 4½ ins. Socket Angle 18° No. 34T

### Multiple Wireless Type

Schedule 1

Wireless clusters Types 3, 3T and 3K are designed for a relatively close grouping of lamps. They are well adapted for indirect lighting, and may be used to advantage with glass balls or domes. Prices include flange tapped for 36 inch iron pipe. Type 600 consists of a brass metal casing provided with porcelain receptacles of special design. The sockets may be connected either multiple or series. Standard finish is brush brass.

TY	PF	3	CLU	IST	T.R
		•	~~~	, -, ,	

List	No. of		Std.	Pkg. Wt.	Mfrs.	W. E. List
No.	Lights	Description	Pkg.	Lbs.	List	Pric <sub>e</sub>
32▲	2	Cluster—16° socket angle	; )	7	<b>\$</b> 1.60	\$2.24
33▲	3	Cluster—16° socket angle	10	7	1.85	2.60
32½⁴	2	Cluster—16° socket angle (Series)	10	7	1.60	2.24
Ty	pe 3 has	two supporting screw holes spaced $1\%$ inches on cen	ters.			
		TYPE 3T CLUSTER				
32 <b>T</b> ▲	2	Cluster—18° socket angle	10	12	\$1.75	<b>\$2.46</b>
33 <b>T</b> ▲	3	Cluster—18° socket angle	10	13	2.00	2.80
34 <b>T</b> ▲	4	Cluster—18° socket angle	10	14	2.25	3.16
35 <b>T</b> ▲	5	Cluster—18° socket angle	10	14	2.50	3.50
36T <b>^</b>	6	Cluster—24° socket angle	10	14	2 75	3 86



Type 3K—Diam. 4½ ins. Socket Angle!24° No. 37K

National Electrical Code Standard.



Type 600-Diam. 6%-11% ins. No. 608

		TYPE 3K CLUSTER			So	chedule 1
List No.	No. of Lights	'Description	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List	W. E. List Price
33K <sup>A</sup> 34K <sup>A</sup> 35K <sup>A</sup> 36K <sup>A</sup> 37K <sup>A</sup>	3 4 5 6 7 pes 3T ar	Cluster—24° socket angle	10 10 10 10 10 aced or	13 14 14 14 14 14 n a circle of	\$2.00 2.25 2.50 2.75 3.00 3 inches	\$2.80 3.16 3.50 3.86 4.20 s diameter.
		TYPE 600 CLUSTER				
608 <sup>A</sup> 610 <sup>A</sup> 612 <sup>A</sup> 915 <sup>A</sup> 920 <sup>A</sup>	8 10 12 15 20	Cluster— 6¾ in. diameter Cluster— 8¾ in. diameter Cluster— 8¾ in. diameter Cluster—11¾ in. diameter Cluster—11¾ in. diameter	10 10 10 10 10	25 31 35 50 65	\$5.00 5.60 6.20 8.00 10.00	\$7.00 7.84 8.68 11.20 14.00

### BRYANT SHADE HOLDERS



No. 501 Uno Screw Holder





Showing position of parts as holder is being attached to socket



No. 443



Showing position of parts when holder is attached to socket

### No. 502 Uno Spring Holder

Bryant Shade Holders The spring shade fastening of Uno and New Wrinkle Shade Holders provides an improved means of securing the shade in the holder and has the following advantages: The locking wire expands and contracts uniformly at every point. The locking wire touches the shade at every point. The locking wire is free to expand as the shade expands from the heat of the lamp, without in any way lessening the security of the fastening. The shade is held absolutely central in the holder. The holder will support the heaviest shades with absolute security. Shades can be attached and removed in one tenth of the time required for holders with three screws. JNO SHADE HOLDERS

A one-piece holder which threads directly on to Bryant-Perkins brass shell sockets and receptacles. Quickest and easiest to put on and stays put. The threading of the bead on the socket and receptacle shells does not prevent the use of other makes of shade holders. W. E. List Mfrs. List Mfrs. List W. E. List per 100 per 100 per 100 List Size Std. per 100 Unfinished No. Description Inches Pkg. Finished Finished Unfinished 21/4 21/4 21/4 21/4 21/4 **\$6.25** \$6.00 **\$**5.20 Screw holder..... 50Ŏ \$5.00 6.34 Solid..... 500 6.60 5.55 5.34 8.70 7.65 7.35 Spring holder..... 250 8.36 250 9.058.70 8.00 7.68 250 9.40 9.03 8.85 8.50

501 532 502 Solid....
Form "H" screw holder.....
Form "H" spring holder..... 533 503 100 8.89 8.48 11.85 11.30 504 505 250 12.50 12.00 11.10 10.66 534 31/4 9.64 11.45 8.60 100 12.85Solid..... 14.25 17.50 506 Spring holder..... 100 19.00 13.13 19.35 535 Solid..... 100 14.54 17.85 13.40 12.49 511 With screws..... 100 16.6515.2511.44 17.00 12.76 15.60 11.72 536 4 100

The above list prices cover brush brass, polished brass or rich gilt. Special finishes, except gold, silver and sand blast, add \$2.10 extra per hundred list. Brush brass shipped unless otherwise ordered.

#### New Wrinkle Shade Holders

Schedule "H"

New Wrinkle Shade Holder is attached to the socket in a manner which is extremely simple and can be accomplished in a minimum time and yet with greater rigidity than is provided in many types of holders now Wt., Lbs. Std. Pkg. Std. Mfrs. List W. E. List on the market. Carton Pkg. per 100 per 100 List No. Style 21/4 inch **\$**18.00 50 20Ŏ 20 \$25.92 440 25 15 24.0034.56 100 · 441 Form H 100 15 30.00 442 3¼ inch

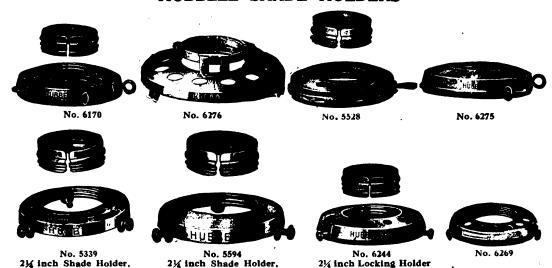
> New Wrinkle Emergency Shade Holder Schedule "H"

The New Wrinkle Emergency Shade Holder has the same method of securing the shade in the holder as described above. It is attached to the socket by means of a screw shell which, introduced between the screw shell and the porcelain wall of the lamp socket, engages with the screw shell of the lamp socket. The screw shell of the shade holder is thoroughly insulated from the holder itself.

It has always been impossible to make a satisfactory shade holder for use in connection with weatherproof and other porcelain sockets and receptacles, as not only do the porcelains vary in thickness but also they are frequently much away from a true circle. It has been mechanically impossible to make a practical holder that would fit porcelains of minimum and maximum thickness and all the various shapes. The New Wrinkle Emergency Shade Holder solves the problem.

443	2¼ inch	<b>25</b> -	100	• •	<b>\$20.00</b>	<b>\$28.80</b>
444	$\mathbf{Form}\;\mathbf{H}$	10	50	•• (	25,00 30,00	36.00
445	3¼ inch	10	50	Digitized by	⊒O(30X000	43 . 20
			=-			

#### **HUBBELL SHADE HOLDERS**



21/4 inch Shade Holder, Regular

Three Screw Shade Holders

Solid

Schedule "D"

List No.	Size Inches	Description	Finish	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List per 100	W. E. List per 100
5339 <sup>A</sup> 5339 <sup>A</sup> 5594 <sup>A</sup> 5594 <sup>A</sup> 5340 <sup>A</sup> 5340 <sup>A</sup> 5596 <sup>A</sup> 5595 <sup>A</sup> 5595 <sup>A</sup> 5597 <sup>A</sup>	21/4/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2	As illustrated above.  As illustrated above.  Solid, as illustrated above.  Solid, as illustrated above.  As shown in illus. No. 5339  Solid, as shown in illus. No. 5594  Solid, as shown in illus. No. 5594  As shown in illus. No. 5339  As shown in illus. No. 5339  As shown in illus. No. 5339  As shown in illus. No. 5349  Solid, as shown in illus. No. 5594  Solid, as shown in illus. No. 5594	Specify fin. Unfinished	50 50 50 25 25 25 25 25 25 25 25 25	1000 1000 1000 1000 250 250 250 250 100 100 100	65 65 70 70 27 27 30 30 20 20 20	\$6.25 5.20 7.70 6.50 14.85 13.05 15.90 14.20 20.55 18.35 23.45 21.65	\$12.50 10.40 15.40 13.00 29.70 26.01 31.80 28.40 41.10 36.70 46.90 43.30
	Locking Spring Shade Holder Schedule "D"							
5528▲ 5528▲	$\begin{vmatrix} 2\frac{1}{4} \\ 2\frac{1}{4} \end{vmatrix}$	As illustrated above	Specify fin. Unfinished	50 50	250   250	17 17	\$8.70 7.65	\$17.40 15.30
		DEEP SKIRTED—TH	REE SCREW	/ TYPE			Sched	ule "D"
6244 6244	$\frac{2\frac{1}{4}}{2\frac{1}{4}}$	Shade holder     Shade holder	Finished Unfinished	50 50	500   500		\$7.50   6.75	\$15.00 13.50
		DEEP SKIRTED—LOCK	CING SPRIN	IG TYPI	Ξ		Sched	ule "D"
6170 6170	$\frac{2\frac{1}{4}}{2\frac{1}{4}}$	Shade holder	Finished Unfinished	50 50	250   250	20 20	\$9.25 8.20	\$18.50 16.40
	4-INCH SHADE HOLDER FOR BRASS SHELL MOGUL BASE SOCKETS Schedule "D"							
6276	4	Shade holder, ventilated	J	20 1	100	20 ı	\$0.25	\$0.50
	HUBBELL DIRECT THREADING SHADE HOLDERS Schedule "G"							

Polished brass, brush brass and rich gilt are standard finishes. ver, add to list per 100, \$1.75. Mfrs. list \$3.50.

Holder, ventilated, three screw type.

Holder, ventilated, three screw type. Holder, ventilated, three screw type. Holder, ventilated, three screw type. Holder, ventilated, lockingspring type

Holder, ventilated, locking spring type

 $\bar{20}$ All other finishes excepting gold and sil-Digitized by GOOGLE

30

30

**37** 

37

20

500

500

250

250

250

250

50

25 25

50

50

Goods shipped brush brass unless otherwise specified.

6269

6269

6271

6271

6275

6275

21/4 21/4 31/4 21/4 21/4

Finished

Finished Unfinished

Finished

Unfinished

Unfinished

\$6.25

5.20

12.50

11.10 8.70 7.65 \$12.50

10.40

25.00

22.20

17.40

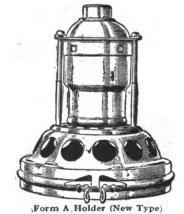
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### GLASS REFLECTOR SHADE HOLDERS



Form T Holder







## Holophane Holders for Electric Sockets

List Prices and Data

List No.	Designation	Finish	Diameter	Standard Quantity	Mfrs. List per 100	W.E. List Each
421953 421954 421955 421956	Form O Holder Form A Holder Form H Holder Form T Holder	Polished or brush brass Polished or brush brass Polished or brush brass Polished or brush brass	$3\frac{1}{4}$ ins.	30 12 30 50	\$0.25 .60 .40 .20	\$0.12 .40 .16 .08

NOTE: Form T Holder for 15% inch neck reflector is an exclusive design, and is furnished only with Holophane glassware.

Special Finishes: The following additional net charges are made for special finishes on Form H and O holders: Oxidized copper or black, 8 cents each, net; when ordered in lots of 500 or more, one kind not assorted, 5 cents each, net. All other finishes, 13 cents each, net; when ordered in lots of 500 or more, one kind not assorted, 8 cents each, net.



P & S 119



Victor Shade Holder

#### P & S Shade Holders

For Porcelain Sockets and Receptacles

Schedule "XA"

List	Description	Carton	Std.	Pkg.	Mfrs. List	W. E. List
No.		Quantity	Pkg.	Wgt.	per 100	per 100
119	Shade holder, 2¼ inch polished brass	24	288	24 lbs.	\$8.50	\$12.24
1190		24	144	24 lbs.	16.25	23.40

	Mfrs. List W. E. List per Gross per Gross		
422036	21/4 inch Polished Brass, Old Brass and Black	144   24 lb	98. \$23.75 <b>\$25.66</b>
422037	24 inch Jap. Bronze, or Oxd. Copper	144   24 lb	os.   27.31   <b>29.50</b>
422038	31/2 inch Polished Brass, Old Brass and Black	144   25 lb	os.   45.00   <b>48.60</b>
422039	3½ inch Jap. Bronze, or Oxd. Copper	144   25 lb	s. 57.75 <b>75.90</b>
422040	4 inch Polished Brass, Old Brass and Black	144   <b>26</b> lb	s.   60.00   <b>64.80</b>
<b>422</b> 041	4 inch Jap. Bronze, or Oxd. Copper	Digiti <b>144</b> b/ <b>26 lb</b>	&○ <b>○</b> 69.00   <b>74.52</b>

#### THE DIM-A-LITE



### Dim-A-Lites and Dimming Sockets

A small attachment for dimming or turning down a single incandescent lamp.

Can be used with either carbon or Mazda lamps up to 40 watts.

Five changes of light can be obtained, viz.: Full half, dim. night light and out.

Saves current, from 30% to 80%, depending upon degree of turn down: U. S. Government test.

Approved by Underwriters. Guaranteed five years

Fits any fixture or chandelier socket and takes any ordinary electric lamp.

Suitable for any current, either direct or alternating.

The pull chain may be made as long as desired.

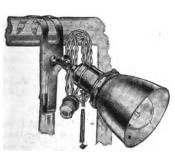
The resistance wire and contact bars are imbedded in a solid fireproof composition called Di-el-ite, which prevents the wire from corroding.

#### STYLES OF DIM-A-LITES

- No. 23. Pull chain, portable, or interchangeable type. Furnished on all orders unless other types are specified.
- No. 24. Portable Shade-holder Type. Operated either by turning shade or pulling cord. Slight turn of shade gives any degree of light desired. Equipped with 2½ inch shade holder. Preferred when the light is within easy reach.

#### **DIMMING SOCKETS**

No. 31. Standard Chain Pull Dimming Socket. Five degrees of light. Standard construction throughout. Combines standard chain pull socket. Dim-a-lite and husk, or shade holder. Attached permanently to fixture stem by thread and set screw. Equipped with highest grade dumbbell unit brass chain. Guaranteed five years.



No. 44

List		Std.	List
No.		Pkg.	Price
23	Dim-a-lite, gun metal or brush brass. 110 volts	48	\$2.10
24	Dim-a-lite, 2¼ ins. solid shade-holder, gun metal or brush brass, 110 volts	50	2.38
34	Dim-a-lite, 2¼ ins. skeleton shade-holder, gun metal or brush brass, 110 volts	50	2.38
31	Dim-a-lite fixture socket, 2¼ ins. shade-holder. brush brass, 110 volts	50	2.88
32	Dim-a-lite fixture socket, brush brass, 110 volts	50	2.88
44	Dim-a-lite portable, brush brass, 110 volts	12	7.12

Special voltages to order and quotations made on foreign types of Dim-a-lite upon request.

Add 19 cents list for 220 volts and 48 cents for 32 volts. Special finishes add 38 cents list for Dim-a-lites and Dim-a-lite fixture sockets. Add \$1.90 list for Dim-a-lite portable.

<sup>\*</sup>A standard package can be made up of only one style or List No.

### **ELECTRIC GLASS SHADES**









Nos. 173, 288, 175

No. 6050

No. 6019

### Electric Shades

List No.		Size	List Price Each	List Price per Doz
173	Roughed inside or roughed outside	$4\frac{3}{8} \times 2\frac{1}{4}$ ins.	\$0.50	\$2.60
288	Roughed inside or roughed outside	$4\frac{3}{4} \times 2\frac{1}{4}$ ins.	.60	3.10
175	Roughed inside or roughed outside	$5\frac{1}{8} \times 2\frac{1}{4}$ ins.	.80	4.14
6012	Roughed inside or roughed outside	5 x $2\frac{1}{4}$ ins.	.80	4.30
6050	Roughed inside or roughed outside	4 x $2\frac{1}{4}$ ins.	.70	3.46
6019	Roughed inside or roughed outside	$4\frac{7}{3} \times 2\frac{1}{4}$ ins.	.70	3.46









No. 159

No. 6072

No. 295

No. 6140

### Electric Shades

List No.		Size	List <b>Price</b> Each	List Price per Doz.
159	Roughed inside or roughed outside		\$0.60	\$2.60
6072	Roughed inside or roughed outside	$5 \times 2\frac{1}{4}$ ins.	1.00	4.66
295	Roughed inside or roughed outside	$4 \times 2\frac{1}{4}$ ins.	1.00	5.16

### Nebulite Tungsten Electrics

#### A Dense White Glass of Great Purity and High Reflecting Power

List No.		Watts	Size	List Price Each	List Price per Doz.
6140	Roughed inside or roughed outside	<b>25</b>	$5\frac{1}{2} \times 2\frac{1}{4}$ ins.	\$0.80	<b>\$4</b> .30
6159	Roughed inside or roughed outside	40	$6\frac{1}{2} \times 2\frac{1}{4}$ ins.	1.10	5.50
6160	Roughed inside or roughed outside	60	7 x $2\frac{1}{4}$ ins.	1.20	6.20
6161	Roughed inside or roughed outside	100	$8 \times 2\frac{1}{4}$ ins.	1.30	6.88
6162	Roughed inside or roughed outside	250	10 x $3\frac{1}{4}$ ins.	<b>_2.00</b>	11.18

Delivery F. O. B. Factory, Philadelphia, Pa. For warehouse deliveries write nearest house.

### OPAL PORCELAIN SHADES







Flat Crimped Edge

Fluted Deep Cone

### Porcelain Shades

#### Flat Opal Shades

List No. 255	Diam. Inches 6 7 8 10	Holder Inches 21/4 21/4 21/4 21/4	Each \$0.40 .48 .63 .75	List Price per Doz. \$2.40 2.85 3.75 4.50	No. 255 255	Diam. Inches 12 14 16 18	Holder Inches 21/4 31/4 31/4 31/4	List Price Each \$1.25 1.40 2.00 2.88	List Price per Doz. \$7.50 8.40 12.00 17.25
			Flat C	rimped E	dge Opal Shad	les			
4251	6 7	$\frac{2\frac{1}{4}}{2\frac{1}{4}}$	<b>\$</b> 0.40 .48	\$2.40 2.85	4251     4251	8 10	$\frac{2\frac{1}{4}}{2\frac{1}{4}}$	\$0.53 .65	\$3.15 3.90
			Fluted	l Deep Co	ne Opal Shad	les		•	
4184 4184	6 7	$\frac{2\frac{1}{4}}{2\frac{1}{4}}$	<b>\$</b> 0.55 .68	\$3.30   4.05	4184	8 10	$\frac{2\frac{1}{4}}{3\frac{1}{4}}$	<b>\$</b> 0.89 1.13	\$5.25 6.75



Deep Cone Shade Opal or Imported Green Glass and Opal Lined



Parabola Green Glass, Porcelain Lined and Plain and Opal Plain Angle Shade



No. 421435 Imported Half Shade

### Deep Cone Porcelain Shades

#### Deep Cone Opal Shades | Imported Deep Cone Green Glass Opal Lined Shades Holder List Diam. List Price List Price Diam. Holder List Price List Price List Inches No. Inches Each per Doz. No. Inches Inches Each per Doz. 2¼ 2¼ 3¼ $2\frac{1}{4}$ $2\frac{1}{4}$ $3\frac{1}{4}$ 258...... 7 \$0.63 **\$**3.75 | 421428..... \$1.80 \$10.80 258 . . . . . . . . . 1.00 421429.... 10 6.00 10 2.47 14.80 6.00 | 421430.... 2.47 14.80 258...... 10 1.00 10

### Parabola Porcelain Shades

Green Plated Plain Angle					Opal Plain Angle Shades						
List	Diam.	Height	Holder	List Price	List Price	List	Diam.	Height	Holder	List Price	List Price
No.	Inches	Inches	Inches	Each	per Doz.	No.	Inches	Inches	Inches	Each	per Doz.
8516	41/4	6	21/4	<b>\$</b> 1.96	\$11.75	8516	41/4	6	21/4	<b>\$</b> 1.88	\$11.25
8518	7	7	$2\frac{1}{4}$	2.28	13.65	8518	7	7	21/4	2.19	13.15

### Imported Half Shades

Green Glass Porcelain Lined For 16 C. P. Lamps. 21/2 inch Holder

List No.	10 10 C. 1. Damps. 2/4 men riolect	List Price Each	List Price per Doz.
421435	Green Glass Opal Lined fluted shade	\$1.50	\$9.00
423607	Green Glass Opal Lined plain shade	1.50	9.00
<b>4236</b> 08	Green Glass Opal Lined plain shade parabola	1.69	10.1 <b>2</b>

### HOLOPHANE GLASS REFLECTORS



Extensive Type XE



Intensive Type



Focusing Type

#### **EXTENSIVE TYPE XTRAFICIENCY REFLECTORS**

List	Mazda Lamp	Diameter	Height	Holder	No. in Std.	Wt. Std.	Packing Charges for	List Price
No.	Watts	Inches	Inches	Inches	Pkg.	Pkg.	Std. Pkg.	Esch
XE- 20	15 or 20	57/8	37/8	21/40	20	27	\$0.76	\$1.28
XE- 25	25	61/2	41/8	2140	20	32	.76	1.44
XE- 40	40	7.	43/4	2140	10	23	.60	1.68
XE- 60	60	75/8	5	21/40	10	30	.60	1.84
XE-100	100	83/4	534	21/4H	10	37	.84	2.40
XE-150	150	10	$\frac{61}{2}$	31/4A	10	52	.96	4.40
XE-200	200 "C"	97/8	73/8	31/4A	10	62	1.20	5.20
XE-250	250 or 300	1134	734	31/4A	6	48	1.16	6.56
XE-500	400 or 500	141/8	85/8	31/4	4	54	1.30	14.56

#### INTENSIVE TYPE XTRAFICIENCY REFLECTORS

XI- 20	15 or 20	6	4	21/40	1 20	1 28	1 \$0.76	\$1.20
XI- 25	25	63/4	41/8	2140	20	36	.76	1.44
XI- 40	40	73/8	45/8	21/40	10	23	.60	1.68
XI- 60	60	73/4	5	21/40	10	29	.60	1.84
XI-100	100	834	$5\frac{3}{4}$	2¼H	10	35	.84	2.40
XI-150	150	105/8	634	31/4A	10	57	.96	4.40
XI-200	200	103%	734	31/A	10	60	1 20	5.20
XI-250	250 or 300	115%	71/4	31/A	6	47	1.16	6.56
XI-500	400 or 500	1434	81/3	31/4	4	55	1.30	14.56

#### FOCUSING TYPE XTRAFICIENCY REFLECTORS

XF- 20	15 or 20	65/8	31/8	21/40	20	29	\$0.76	\$1,20
XF- 25	25	7	4	2140	20	32	.76	1.44
XF- 40	40	73/4	43/8	2¼O	10	20	.60	1.68
XF- 60	60	814 93/8	43/4	21/40	10	28	.60	1.84
XF-100	100		51/8	2¼H	10	32	.84	2.40
XF-150	150	115%	61/2	31/4A	10	56	.96	4.40
XF-250	250	131/4	73%	1 3¼A	6	49	1.16	6.56



No. 983



No. 963



No. 8300

#### REFLECTORS FOR WINDOW LIGHTING

Reflector 983 is used in most cases in connection with the high efficiency Type C 100 watt lamp. Reflector 963 is for very shallow windows.

983	100	103/8	61/2	21/4H	15	65	\$1.20	\$2.64
963	100	101/2	51/4	21/4H	15	65	1.20	2.64
8300 } or	100	105/8	53/8	21/4H	15	65	1.20	2.64

#### XTRAFICIENCY CONCENTRATING REFLECTORS

List No.	Mazda Lamp Watts	Diam. Inches	Height Inches	Holder Inches	No. in Std. Pkg.	Wt. Std. Pkg.	Packing Charges for Std. Pkg.	List Price Each
XF- 25	15 or 20	7	4	21/40	20	32	\$0.76	\$1.44
XF- 40	25	73/4	43/8	21/40	10	20	.60	1.68
XF- 60	40	81/4	43/4	2140	10	28	.60	2,40
XF-100	60	93/8	51/8	21/40	10	32	.84	2.40
8300	100	105/8	53/8	21/4H	15	65	0 0 20	2.64

### HOLOPHANE GLASS REFLECTORS

FOR TYPE C LAMPS





Intensive Type XI





Fecusing Type XF

Nos. 02560 VS, 02570 VS and 06290 VS

### Extraficiency Holophane Glass Reflectors

#### EXTENSIVE TYPE

List Lan	Ŕecom. "C"	Dimensions in Inches			Approx.	No.in	Packing	List
	Lamp Watts	Diam.	Height	†Holder	Shpg. Wt. Std. Pkg.	Std. Pkg.	Charges for Std. Pkg.	Price Each
XE- 75VF XE-100VF XE-150VF XE-200VF XE-250VF XE-500VF	75 100 200 200 300 400, 500	8½ 75% 10 97% 11¾ 14½	57/8 5 61/2 73/8 73/4 85/8	2¼0 2¼H 3¼A 3¼A 3¼A 3¼A 3¼A	33 37 52 62 48 54	10 10 10 10 10	\$0.84 .84 .96 1.20 1.16 1.30	\$2.24 2.52 4.64 5.44 6.88 12.80

#### INTENSIVE TYPE

#### **FOCUSING TYPE**

XF-100VF	100	93/8	5½	2¼H	32	10	\$0.84	\$2.52
XF-150VF	200	115/8	6½	3¼A	56	10	.96	4.64
XF-250VF	300	131/4	7¾	3¼A	49	6	1.16	6.88

### HOLOPHANE-REALITE UNITS

#### Large Units

These Holophane-Realite Units are furnished with velvet finished reflectors and satin-finished bowls, smooth outside, but with a sunburst of prisms inside. They diffuse the light, are highly efficient, and do not change the color value of the lamps. The fixtures for these units are especially ventilated for use with the new high efficiency Type C lamp.

#### Complete Unit, Velvet Reflector and S. F. Bowl

List Recom. "C" Lamp Watts	Recom. "C"	Dimensions in Inches			Approx.	No. in	Packing	List
		Dian.	Height	Holder	Shp. Wt. Std. Pkg.	Std. Pkg.	Charges for Std. Pkg.	Price Each
02560VS	100	105/8	145/8	31/4	70	4	\$1.20	\$18.04
02570VS	$\{{}^{100}_{200}\}$	123/4	155/8	31/4	<b>72</b> ·	3	1.20	23.10
06290VS	$\left  \begin{array}{c} 300 \\ 400 \\ 500 \end{array} \right $	14¾	173/4	4	70	2	1.20	33.78

### **METAL REFLECTORS**

#### For Industrial Illumination

Thoroughly efficient illumination is more than a humanitarian necessity in industrial plants. It secures and perpetuates economies apart from the beneficial effect upon employees. Scientifically correct illumination may be reckoned in terms of time saved in producing a given amount of work, in greater accuracy of operatives, in minimizing accidents and in promoting better working facilities by providing brighter and more cheerful surroundings.

The most important consideration in factory illumination is not to have more brilliant light but to make more and better use of the light available. Light runs its free course unless controlled at its source. The light effused from lamps should be diffused by reflectors, otherwise it is lost; also its cost. It should be directed from where it isn't wanted to where it is needed—guided without deviation from the lamp to the object of illumination. This may be accomplished with unerring precision by using reflectors selected with proper regard to their functional qualifications in association with various sizes and shapes of lamps.

The following reflectors are correctly designed for new installations and designed to correct existing faults in old lighting systems. They are shaped and finished to distribute light over extended areas, to concentrate it in a brilliant beam, or to give any intermediate distribution desired.

#### **FINISHES**

The bodies of reflectors are made of best quality open hearth steel, thoroughly annealed to insure uniform tensile strength and deep-drawing qualities. They are supplied in three standard inside finishes—matte aluminum, white porcelain enamel, white paint enamel. The standard color of the outside finish of all reflectors is green.

#### MATTE ALUMINUM FINISH

Before the aluminum is applied, the reflector bodies are immersed in a chemical bath which removes from the pores of the metal all dirt and greasy substances. They are then scrubbed in a special solution and quickly dried to prevent rust formation. A binding coat of aluminum is then applied by air brush and heat-dried, after which a heavier coat of aluminum is applied. They are then given a transparent coating which protects the aluminum and preserves its reflective qualities. The final coating forms a hard, smooth surface resistant to injury when reasonable care is exercised in cleaning.

#### PORCELAIN ENAMEL FINISH

As the inside is the working side of a reflector it is most essential that the finish be smooth and uniform to prevent distorted reflection of light. The porcelain enamel finish is absolutely free from cracks, blowholes and indentions. The reflectors are given three coats of best quality, pure white enamel, all of which are baked on at high temperature, forming a finish with the gloss and hardness of glass.

#### WHITE PAINT ENAMEL FINISH

This finish, while closely resembling porcelain enamel, has individual characteristics which greatly enhance the appearance and service qualities of the reflectors. Several coats of pure white paint enamel are applied, and each is baked on at gradually increasing temperature in an automatically regulated oven. The reflectors are subjected to slow cooling after each baking to prevent formation of cracks, due to contraction of the metal. The finish in final form is smooth, tough, extremely durable and permanent in color.

#### **KEY TO LETTERS AND NUMERALS**

Light distribution: B, diffusing; D, distributing; E, extensive; F, focusing; I, intensive; N, angle; W, wide.

Size, numerals 25, 40, 60, etc., indicate the wattage of lamps.

Holders: H, Hubbell screw holder; P, porcelain socket holder; S, detachable screw casing; 3445, medium strap holder socket; 3413, Mogul strap holder socket; 3451, 3453, 3454, 3455, 3456, 3459, medium covered strap holders; 3457, 3458, 3485, Mogul covered strap holders.

Inside finishes: A. aluminum; M, porcelain enamel; T, paint enameled by GOOGIC

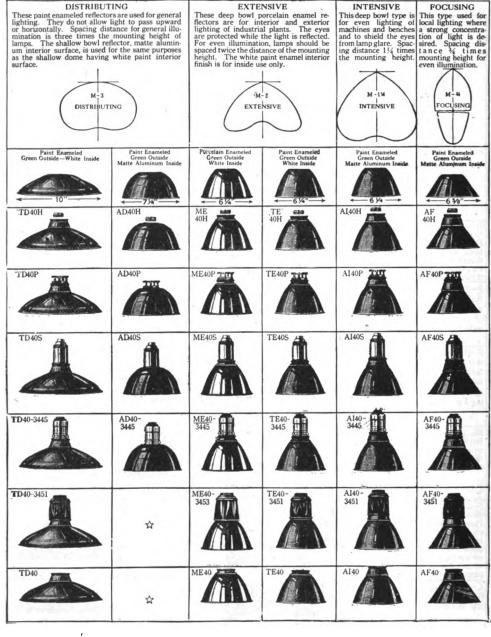
### **METAL REFLECTORS**

REFLECTO FOR 40 AND 50 W TYPE "B" LA	ATT	These Reflectors han angle of 30° shown. Spacing the distance the lan face to be illuminated.	NGLE ang approximately at distributing light as distance is 1¼ times up hangs from the sur- ed. Designed for light- hes, presses and other afford eye protection.	WIDE These flat dome porcelain enamel reflectors are for spread ing light over great areas where it is neither desired nor essen- tial to have even illumination.	DISTRIBUTING These shallow dome porcelain enamel reflectors are for gen- eral lighting. They do not allow light to pass upward or horizontally Spacing distance should be three times the mounting height of lamp.
		ANGLE	ANGLE	WIDE	M-3 DISTRIBUTING
	)	Porcelain Enameled Green Outside White Inside	Paint Enameled Green Outside Matte Aluminum Inside	Porcelain Enameled Green Outside—White Inside	Porcelain Enameled Green Outside—White Inside
H — Hubbell Screw Collar Holder. For all brass shell, me- dium base sock- ets, beaded or threaded shells.	A	MN40H	AN40H	MW60H	MD40H
P—Brass Clamp Holder For most any make of porcelain socket.		MN40P	AN40P	MW60P	MD40P
S—HubbellKey- less Porcelain Socket with alu- minum detach- able screw cas- ing. For 3/4" pipe.		MN40S	AN40S	MW60S	MD4CS
No. 3445—Hub- bell Keyless Por- celain Socket with strap hold- er. For ¾" pipe.	A	MN40-3445	AN40-3445	MW60-3445	MD40-3445
Nos. 3451, 3453, 3454 — Hubbell Porcelain Sock- ets with strap holder and Ja- panned ventilat- ed corrugated cover For ½" pipe.		MN40- 3454	AN40-3451	☆	MD40-3454
L — Extension. For any standard 2¼" Holder		MN40	AN40	☆	MD40

### List Price and Data

List No.	Std. Pkg.	Mfr's. List Each	W.E. List Each	List No.	Std. Pkg.	Mfrs. List Each	W. E. List Each
AN -40H AN -40P AN -408 AN -40-3445 AN -40-3451 AN -40 MD-40 MD-40H MD-40P MD-40P MD-40P MD-408445 MD-40-3445 MD-40-3445	50 30 20 50 50 50 50 50 30 20	\$0.80 1.10 1.50 1.50 1.90 .70 1.26 1.51 1.66 2.06 2.06	\$1.12 1.54 2.10 2.66 .98 1.76 1.97 2.32 2.88 3.50	M N -40H M N -40R M N -408 M N -40-3445 M N -40-3454 M N -40 M W -25 M W -25 M W -25 M W -258 M W -25-3545	50 30 20 50 50 50 50 50 50 50 20 50	\$1.65 1.80 2.20 2.20 2.64 1.40 1.13 1.28 1.68	\$2.32 2.52 3.08 3.08 3.70 1.96 1.58 1.79 2.35 2.35

### METAL REFLECTORS



#### List Prices and Data

List No.	Std. Pkg.	Mfrs. List Each	W. E. List Each	List No.	Std. Pkg.	Mfrs. List Each	W. E. List Each
TD-40H	50	\$0.90	\$1.28	TE-40P	30	\$1.25	\$1.74
TD-40P	30	1.20	1.68	TE-408	20	1.65	2.31
TD-408	20	1.60	2.24	TE-40-3445	50	1.65	2,31
TD-40-3445	50	1.60	2.24	TE-40-3451	50	2.05	2.87
TD-40-3451	50	2.00	2.80	TE-40	∙50	.85	1.19
TD-40	50	. 80	1.12	AI -40H	50	.95	1.33
AD-40H	50	.80	1.12	AI -40P	30	1.25	1.74
AD-40P	30	1.10	1.54	AI -408	20	1.65	2.31
AD-40S	20	1.50	2.10	AI -40-3445	50	1.65	2.31
AD -40-3445	50	1.50	2.10	AI -40-3451	50	2.05	2.87
ME-40H	50	1.25	1.74	AI -40	50	. 85	1.19
ME-40P	30	1.40	1.96	AF-40H	50	. 84	1.18
ME-40S	20	1.80	2.52	AF-40P	30	1.14	1.80
ME-40-3445	50	1.80	2.52	AF-40S	20	1.54	2,16
ME-40-3453	50	2.22	3.12	AF-40-3445	50	a a d. 54	2.16
ME-40	50	1.00	1.40	AF-40-3451	Digitized 50	UUY.194	2.72
TE -40H	50	.95	1.33	AF-40	50	○.74	1.04

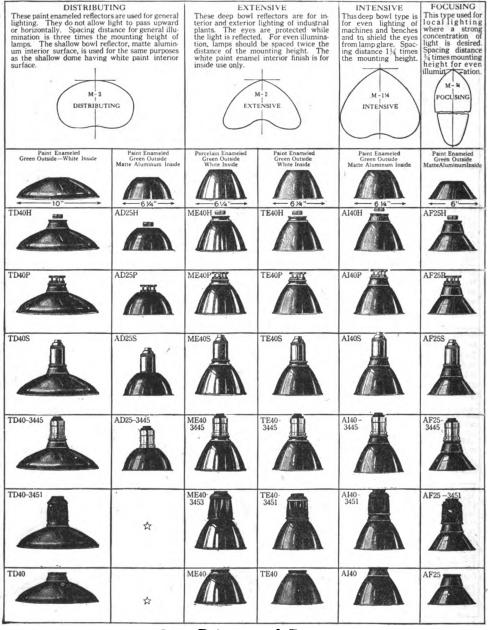
### **METAL REFLECTORS**

REFLECTORS FOR TYPE B LAMPS IN SIZES 10, 15, 20 AND 25 WATT	These Reflectors his an angle of 30° shown. Spacing of the distance the lam face to be illuminate ing surfaces of lath machines and to a	IGLE ang approximately at distributing light as listance is 11; times p hangs from the sur- distribution of the sur- dist	WIDE These flat dome porcelain enamel reflectors are for spreading light over great areas where it is neither desired nor essential to have even illumination.	DISTRIBUTING These shallow dome percelain enamel reflectors are for gen- eral lighting. They do not allow light to pass upward or horizontally Spacing distance should be three times the mounting height of lamp.  M-3  DISTRIBUTING
	Porcelain Enameled Green Outside White Inside	Paint Enameled Green Outside Matte Aluminum Inside	Porcelain Enameled Green Outside – White Inside	Porcelain Enameled Green Outside – Whate Inside
H — Hubbell Screw Collar Holder. For all brass shell, me- dium base sock- ets, beaded or threaded shells.	MN40H	AN40H	MW25H	MD40H
P-Brass Clamp Holder. For most any make of porcelain socket.	MN401	AN40P	MW25P	MD40P
S—HubbellKey- less Porcelain Socket with alu- minum detach able screw cas- ing. For ¾"pipe.	MN40S	AN40S	MW25S	M.D463
No. 3445—Hubbell Keyless Porcelain Socket with strap holder. For 35" pipe.	MN40 3445	AN40-3445	MW25-3445	MD40 3445
Nos. 3451, 3453, 3454 — Hubbell Porcelain Sockets with strap holder and Japanned ventilated corrugated cover. For ½" pipe.	MN40 3454	AN40 3451	<b>☆</b>	MiM0-3454
L — Extension. For any standard 2½" Holder.	MN40	AN40	<u>.</u>	MD40

### List Prices and Data

		Mfrs.	1	l		Mfrs.	
List	Std.	List	W. E. List	List	Std.	List	W. E. List
No.	Pkg.	Each	Each	No.	Pkg.	Each	Each
MH40H	<b>5</b> Ŏ	<b>\$1.65</b>	\$2.31	MW-60H	<b>5</b> Ŏ	\$1.38	<b>\$1.93</b>
MN-40P	30	1.80	2.52	MW-60P	30	1.53	2.14
MN-408	20	2.20	3.08	MW-60S	20	1.93	2.70
MN-40-3445	50	2.20	3.08	MW-60-3445	50	1.93	2.70
MN-40-3454	50	2.64	3.70	MD-40H	50	1.51	2.11
MN-40	<b>5</b> 0	1.40	1.96	MD-40P	30	1.66	2.32
AN -40H	50	.80	1.12	MD-408	20	2.06	2.88
AN -40P	30	1.10	1.54	MD-408-3445	50	2.06	2.88
AN -40S	20	1.50	2.10	MD-40-3454	50	2.50	3.50
AN -40-3445	50	1.50	2.10	MP -40	50	1.26	1.76
AN -40-3451	50	1.90	2.66				
AN -40	50	.70	.98		(	200010	
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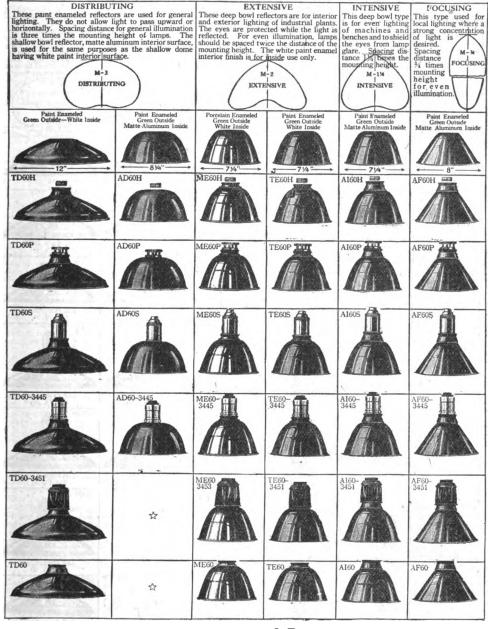
### **METAL REFLECTORS**



### List Prices and Data

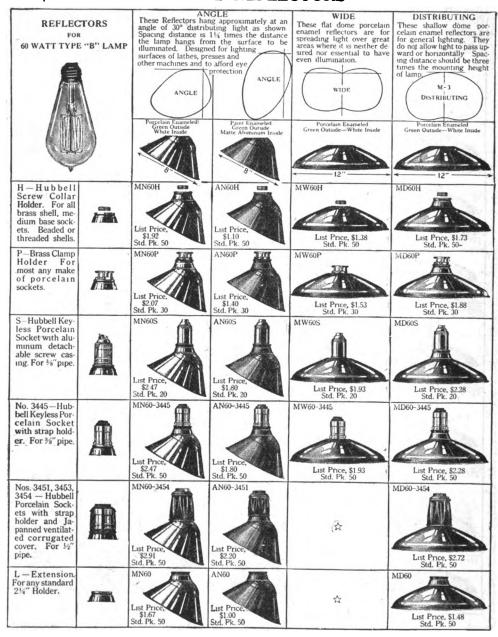
List No.	Std. Pkg.	Mfrs. List Each	W.E. List Each	List No.	Std. Pkg.	Mfrs. List Each	W. E. List Each
TD-40H	50	\$0.90	\$1.26	TE-40P	30	\$1.25	\$1.75
TD-40P	30	1.20	1.68	TE-40S	20	1.65	2.31
TD-408	 20	1.60	2.24	TE-40-3445	50	1.65	2.31
TD-40-3445	50	1,60	2.24	TE-40-3451	50	2.05	2.87
TD-40-3451	50	2.00	2.80	TE-40-40	50	.85	1.19
TD-40	50	.80	1.12	AI -40H	50	.95	1.14
AD-25H	50	.65	.91	AI -40P	30	1.25	1.75
AD-25P	30	.95	1.33	AI -40S	20	1.65	2.31
AD-258	20	1,35	1.89	AI -40-3445	50	1.65	2.31
AD-25-3445	50	1,35	1.89	AI -40-3451	50	2.05	2.87
ME-40H	 50	1.45	2.03	AI -40	50	.85	1.19
ME-40P	30	1.40	1.96	AF-25H	50	.85 .76	1.06
ME-40S	20	1.80	2.52	AF-25P	30	1.06	1,48
ME-40-3445	50	1.80	2.52	AF-25S	20	1.26	1.76
ME-40-3453	50	2.22	3.11	AF-25-3445	50	1.46	2.04
ME-40	50	1.00	1.40	AF-25-3451		-001.860	2.60
TE-40H	50	.95	1.33	AF-25	D gitize by	300%66	.92

# Western Electric METAL REFLECTORS



List Prices and Data										Schedul	e "C"
•		Mfrs.	W. E.	}		Mfrs.	W. E. i	1		Mfrs.	W. E.
List	Std.	List	List	List	Std.	List	List	List	Std.	List	List
No.	Pkg.	Each	Each	No.	Pkg.	Each	Each	No.	Pkg.	Each	Each
TD-60H	50	\$1.03	\$1.44	ME-60S	20	\$2.04	\$2.86	AI -60S	20	\$1.80	\$2.52
TD-60P	30	1.33	1.86	ME-60-3445	50	2.04	2.86	AI -60-3445	50	1.80	2.52
TD-60S	20	1.73	2.42	ME-60-3453	50	2.46	3.44	AI -60-3451	50	2.20	3.08
TD -60-3445	50	1.73	2.42	ME-60	50	1.24	1.73	AI -60	50	1.00	1.40
TD-60-3451	50	2.13	2.98	TE -60H	50	1.06	1.48	AF -60H	50	1.10	1.54
TD-60	50	.93	1.30	TE -60P	30	1.36	1.90	AF -60P	30	1.40	1.96
AD-60H	50	.98	1.37	TE -60S	20	1.76	2.46	AF -60S	20	1.80	2.52
AD-60P	30	1.28	1.79	TE -60-3445	50	1.76	2.46	AF -60-3445	50	1.80	2.52
AD-608	20	1.68	2.35	TE -60-3451	50	2.16	3.02	AF -60-3451	50	2.20	3.08
AD-60-3445	50	1.68	2.35	TE -60	50	.96	1.34	AF -60	50	1.00	1.40
ME-60H	50	1.49	2.09	AI -60H	50	1.10	1.54				
ME-60P	30	1.64	2.30	AI -60P	30	1.40	1.96			T	
			•	•				Digitized by 🔾	200	le	

### **METAL REFLECTORS**



### List Prices and Data

List No.	.Carton	Std. Pkg.	Mfrs. List	W. E. List	List   No.	Carton	Std. Pkg.	Mfrs.	W. E. List
MN60-H MN60P MN60S NN60-3445 MN60-3454 MN60 AN60H AN60P AN60P AN60S AN60-3445 AN60-3451	535555555555	50 30 20 50 50 50 50 30 20 50	\$1.92 2.07 2.47 2.47 2.91 1.67 1.10 1.40 1.80 1.80 2.20	\$2.68 2.88 3.46 3.46 4.08 2.34 1.54 1.96 2.52 2.52 2.52 3.08	AN60 MW60H MW60P MW60S MW60-3445 MD60H MD60P MD60S MD60-3445 MD60-3454 MD60	55355555555	50 50 30 20 50 50 30 20 50 50 50	\$1.00 1.38 1.53 1.93 1.73 1.88 2.28 2.72 1.48	\$1.40 1.94 2.14 2.70 2.70 2.42 2.64 3.20 3.80 2.16

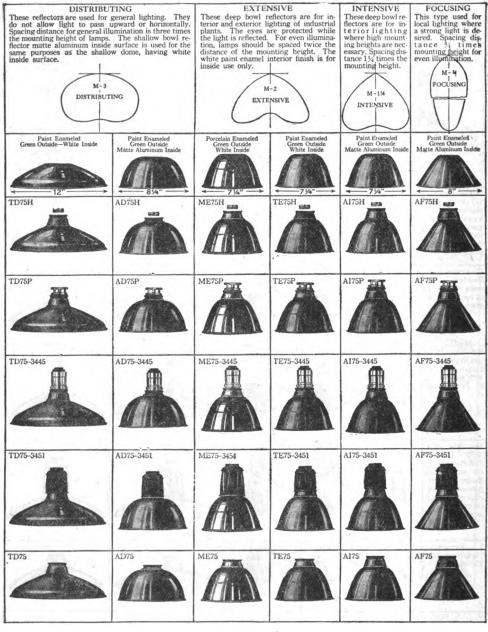
## METAL REFLECTORS

REFLECT FOR 75 WAT TYPE "C" L	т	These Reflectors at an angle of 30' shown Spacing	NGLE hang approximately distributing light as distance is 1½ times lamp hangs from the minated  ANGLE	WIDE These flat done porcelain enamel reflectors are for spreading light over great areas where it is neither desired nor essential to have even illumination.	enamel reflectors are for gen- eral lighting. They do not
H—Hubbell Screw Collar Holder For all brass shell, medium base sockets having either beaded or threaded shells		Porcelain Enameled Green Outside White Inside	Paint Enamelde Green Outside Matte Aluminum Inside	Porcelain Enameled Green Outside—White Inside	Porcelan Enameled Green Outside—White Inside
P—BrassClamp Holder For most any make of medium base porcelain socket		MN75P	AN75P	MW75P	MD75P
No 3445—Hubbell Keyless Porcelain Socket with strap holder For 3% pipe.		MN75- 3445	AN75- 3445	MW75-3445	MD75—3445
Nos. 3451, 3454, 3455 — Hubbell Porcelain Sock ets with strap holder and Japanned ventilated corrugated gover. For ½" appe.		MN75-3455	AN75 - 3451	MW75—3455	MD75—3455
L — Extension. For any standard 24". Holder		MN75	AN75	MW75	MD75

### List Prices and Data

List No.	Std. Pkg.	Mfrs. List Each	W. E.   List Each	List No.	Std. Pkg.	Mfrs. List Each	W. E. List Each
M N-75H	50	<b>\$</b> 2.20	\$3.08	MW-75H	50	<b>\$</b> 2.20	\$3.08
M N-75P	30	2.35	3.29	MW-75P	30	2.35	3.29
MN-75-3445	50	2.75	3.85	MW-75-3445	50	2.75	3.85
MN-75-3455	50	3.21	4.49	MW-75-3455	50	3.21	4.49
MN-75	50	1.95	2.73	MW-75	50	1.95	2.73
AN -75H	50	1.22	1.71	MD-75H	50	1.85	2.59
AN -75P	30	1.52	2.13	MD-75P	30	2.00	2.80
AN -75-3445	50	1.92	2.69	MD-75-3445	50	○ 2.40 T	3.36
AN -75-3451	50	2.32	3.25	MD-75-3455	Digi <b>50</b> ed by	G2(8671C	4.00
AN -75	50	1.12	1.57	MD-75	50	1.60	2.29

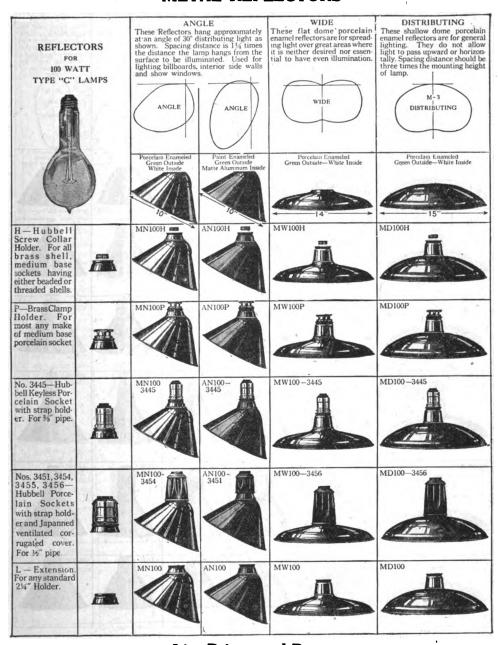
### **METAL REFLECTORS**



### List Prices and Data

		Mfrs .	W. E.	·	1	Mfrs.	W. E.			Mfrs.	W.E.
List	Std.	List	List	List	Std.	List	List	List	Std.	List	List
No.	Pkg.	Each	Each	No.	Pkg.	Each	Each	No.	Pkg.	Each	Each
TD-75H	<b>5</b> Ö	\$1.14	\$1.60	ME-75H	<b>5</b> 0	1.59	2.23	AI -75H	5Ŏ	1.20	1.68
TD -75P	30	1.44	2.02	ME-75P	30	1.74	2.44	AI -75P	30	1.50	2.10
TD-75-3445	50	1.84	2.58	ME-75-3445	50	2.14	3.00	AI -75-3445	50	1.90	2.66
TD-75-3451	50	2.24	3.14	ME-75-3454	50	2.58	3.61	AI -75-3451	50	2.30	3.22
TD-75	50	1.04	1.46	ME-75	50	1.34	1.88	AI -75	50	1.10	1.54
AD-75H	50	1.14	1.60	TE -75H	50	1.12	1.57	AF -75H	50	1.20	1.68
AD -75P	30	1.44	1.60	TE -75P	30	1.42	1.99	AF -75P	30	1.50	2.10
AD-75-3445	50	1.84	2.58	TE -75-3445	50	1.82	2.55	AF -75-3445	_50 ∏	_ 1.90	2.66
AD-75-3451	50	2.24	3.14	TE -75-3451	50	2.22	3.11	AF -75-3451	$\bigcirc$ 50 $\square$	2.30	3.22
AD-75	50	1.04	1.46	TE -75	50	1.02	1.43	AF -75	50	1.10	1.54

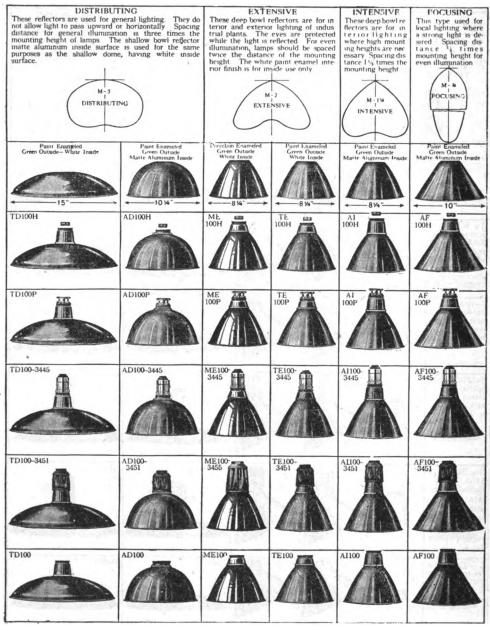
#### METAL REFLECTORS



#### List Prices and Data

List No.	Std. Pkg.	Mfrs. List Each	W. E.   List Each	List No.	Std. Pkg.	Mfrs. List Each	W. E. List Each
MN-100H	30	<b>\$</b> 2.75	\$3.83	MW-100H	30	<b>\$</b> 2.35	\$3.29
MN-100P	18	2.90	4.06	MW-100P	18	2.50	3.50
MN-100-3445	30	$^{13.30}$	4.62	MW-100-3445	30	2.90	4.06
MN-100-3454	30	3.74	5.24	MW-100-3456	30	3.40	4.76
MN-100	30	2.50	3.50	MW-100	30	2.10	2.94
AN -100H	30	1.64	2.30	MD-100H	30	2.75	3.85
AN -100P	18	1.94	2.71	MD-100P	18	2.90	4.06
AN -100-3445	30	2.34	3.28	MD-100-3445	_ 30	3,30,0	4.62
AN -100-3451	30	2.74	3.84	MD-100-3456	Di <b>30</b> ized b	3.80 X I	5.32
AN -100	30	1.54	2.16	MD-100	30	2.50	3.50

#### **METAL REFLECTORS**



## List Prices and Data

		Mfrs.	W. E.	1		Mfrs.	W. E.	ll.		Mfrs.	W. E.
List	Std.	List	List	List	Std.	List	List	List	Std.	List	List
Ņo.	Pkg.	Each	Each	No.	Pkg.	Each	Each	No.	Pkg.	Each	Each
TD-100H	30	\$1.36	\$1.90	ME-100H	30	\$1.75	\$2.45	AI -100H	30	\$1.30	\$1.82
TD-100P	18	1.66	2.32	ME-100P	18	1.90	2.66	AI -100P	18	1.60	2.24
TD-100-3445	30	2.06	2.88	ME-100-3445	30	2.30	3.22	AI -100-3445	30	2.00	2.80
TD-100-3451	30	2.46	3.44	ME-100-3455	30	2.76	3.86	AI -100-3451	30	2.40	3.36
TD-100	30	1.26	1.76	ME-100	30	1.50	2.10	AI -100	30	1.20	1.68
AD-100H	30	1.36	1.90	TE -100H	30	1.25	1.75	AF -100H	30	1.50	2.10
AD-100P	18	1.66	2.32	TE-100P	18	1.55	2.17	AF -100P	18	1.80	2.52
AD-100-3445	30	2.06	2.88	TE -100-3445	30	1.95	2.73	AF -100-3445	30⊩	2.20	3.08
AD-100-3451	30	2.46	3.44	TE -100-3451	30	2.35	3.29	AE-100-3451	30	$\bigcirc 2.60$	3.64
AD -100	30	1.26	1.76	TE -100	30	1.15	1.61	AF -100	30	1.40	1.96

## **METAL REFELCTORS**

REFLECTORS FOR 200 WATT TYPE "C" L	bute light as she times the distar surface to be ill billboards, build in factories whe	ANGLE mameled angle reflectors distri- mon. Spacing distance is 1½ noe the lamp hangs from the uminated. Recommended for ng fronts and as side wall units re cranes or other appearatus general overhead lighting.	DIFFUSING  These reflectors are recommended for general illumination. When fitted with opal globes they spread a soft, diffused light. May be used in addition to local lights
		ANGLE	DIFFUSING
	Anal	e-Porcelan Enameled Outside-White Inside	Flat Donze with 6" Hotder—Percelain Enameled Green Outside—Whate Inside
P-Brass Clamp Holder. For most any make of porcelain socket.	MN200P		MB200P
No. 3445—Hubbell Keyless Porcelain Socket with strap holder. For 34" pipe.	MN200-3445		MB200-3445
Nos. 3451, 3455 3456 and 3459— Hubbell Porce- lain Sockets with strap hold- er and Japanned ventilated cor- rugated cover. For ½" pipe.	MN200-3455		MB200-3459
L-Extension. For any standard 24" Holder.	MN200		MB200

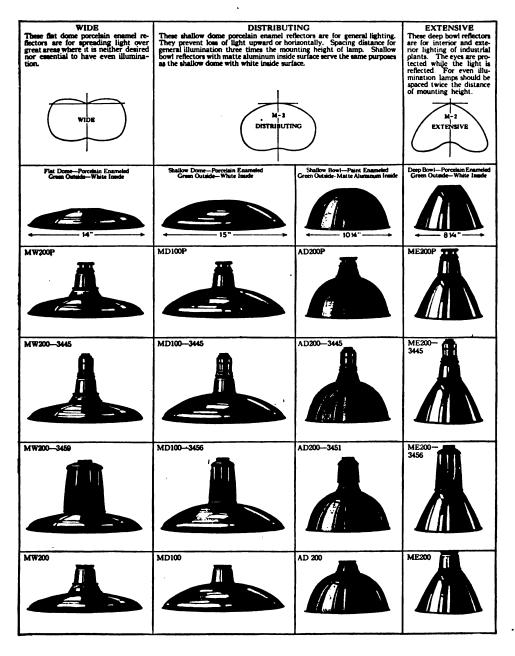
#### W. E. Mfrs. W. E. | Mfrs.

Schedule "C"

List	Std.	List	List	1	Std.	List	List
No.	Pkg.	Each	Each		Pkg.	Each	Each
MN-200P MN-200-3445 MN-200-3455 MN-200	18 , 30 30 30	\$3.00 3.40 3.86 2.60	\$4.20 4.76 5.40	MB-200P MB-200-3445 MB-200-3459 MB-200	18 30	\$3.28 3.68 4.33 2.88	\$4.59 5.15 6.06 4.03

List Prices and Data

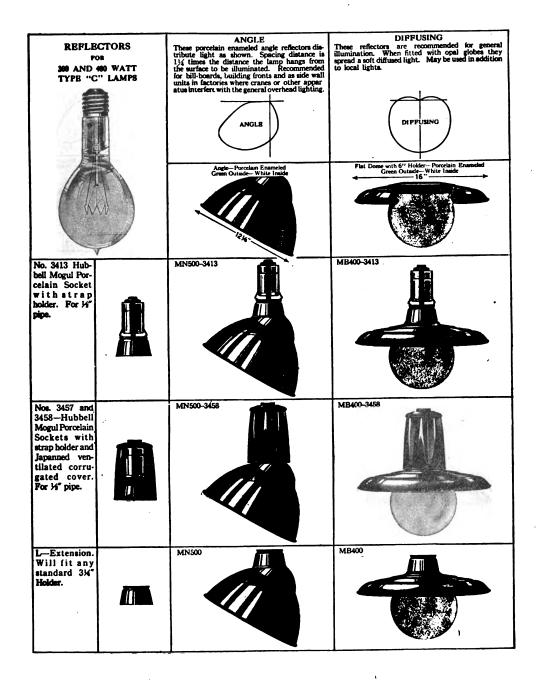
#### **METAL REFLECTORS**



#### List Prices and Data

List No.	Std. Pkg.	Mfrs. List Each	W. E. List Each	· List No.	Std. Pkg.	Mfrs. List Each	W. E. List Each
MW-200P	18	\$2.88	\$4.03	AD-200P	18	\$1.80	\$2.52
MW-2003445	30	3.28	4.59	AD-200-3445	30	2.20	3.08
MW-200-3459	30	3.93	5.50	AD -200-3451	30	2.60	3.64
MW-200	30	2.48	3.47	AD-200	30	1.40	1.96
MD-100P	18	2.90	4.06	ME-200P	18	2.05	2.87
MD-100-3445	30	3.30	4.62	ME-200-3445	30	2.45	· 3.43
MD-100-3456	30	3.80	5.32	ME-200-3456	30	2.95	4.13
MD-100	30	2.50	3.50	ME-200	Digitize 30 by	0013650	2.31

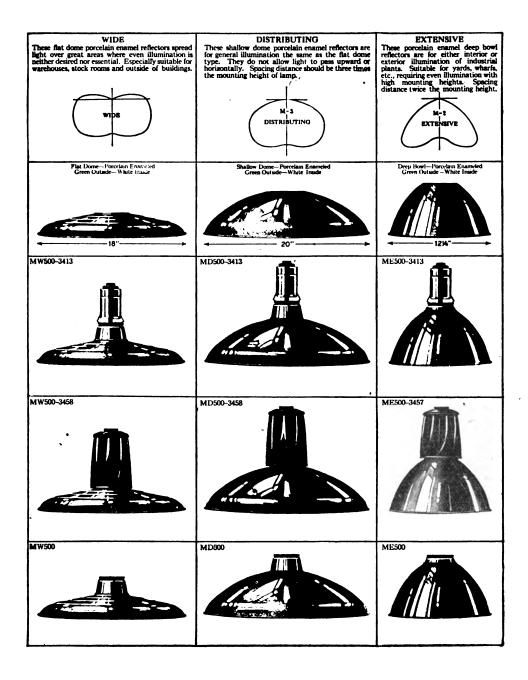
#### **METAL REFLECTORS**



#### List Prices and Data

List No. MN-500-3413 MN-500-3458 MN-500	Std. Pkg. 10 10	Mfrs. List Each \$6.18 6.88 4.38	9.63	List		Mfrs. List Each \$5.64 6.34	W. E. List Each \$7.90 8.88 5.38
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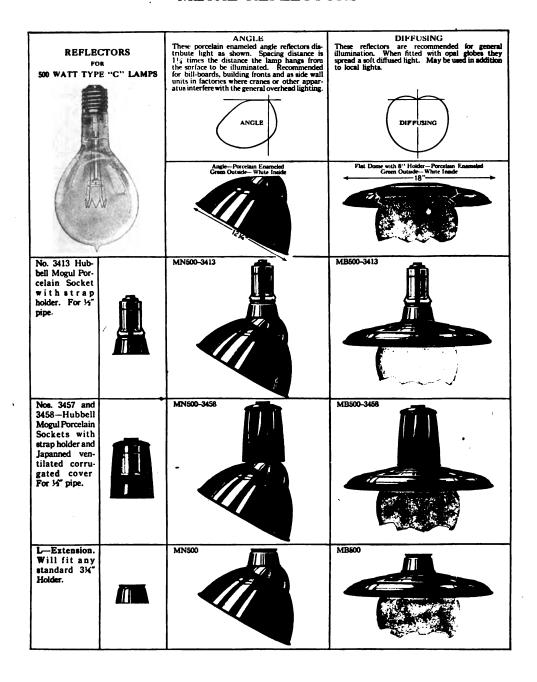
#### **METAL REFLECTORS**



#### List Prices and Data

List No.	Std. Pkg.	Mfrs. List Each	W. E. List Each	List No.	Std. Pkg.	Mfrs. List Each	W. E. List Each
MW-500-3413	10	<b>\$</b> 5 90	\$8.26	MD-500	10	<b>\$</b> 4.38	\$6.13
MW-500-3458	10	6.60	9.24	ME-500-3413	10	4.40	6.16
MW-500	10	4.10	5.74	ME-500-3457	10	-05.00e	7.00
MD-500-3113	10	6.18	8.65	ME-500	Digitized by	2.60	3.64
MD-500 31 8	10	6.88	9 63				

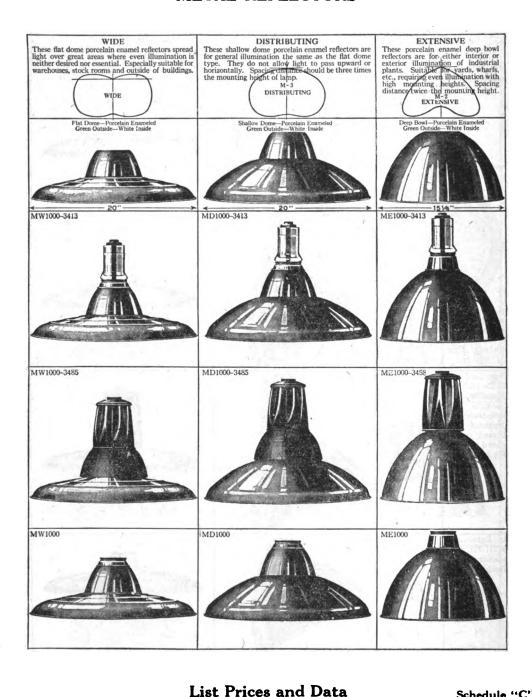
#### **METAL REFLECTORS**



#### List Prices and Data

		Mfrs.	W. E.	ı		Mfrs.	W. F.
List	Std.	List	List	List	Std.	List	List
No.	Pkg.	Each	Each	No.	Pkg.	Each	Each
MN-500-3413	10	<b>\$</b> 6.18	\$8.65	MB-500-3413	10	⇒ \$6.32 <sub>□</sub>	\$8.88
MN-500-3458	10	6.88	9.63	MB-500-3458	Digitiz <b>t0</b> by	J (7.02 C	9.83
MN-500	10	4.38	6.13	MB-500	10	4.52	6.33

#### **METAL REFLECTORS**



#### Schedule "C" W. E. W. E. Mfrs. Mfrs. Std. List List List Std. List List List A No. Pkg. Each Pkg. Each No. Each Each MW-1000-3413 5 \$7.70 \$10.78 MD-1000 5 \$6.17 \$8.64 MW-1000-3485 5 9.00 12.60 ME-1000-3413 5 6.18 8.65 MW-1000 8.26 ME-1000-3458 6.88 5 5.905 9.63 MD-1000-3413 5 7.97 12.42 ME-1000 Digitized by GOO 380 6.13 MD-1000-3485 9.2512.95

#### PORCELAIN SOCKETS AND GLOBE HOLDERS



#### Medium Base Porcelain Sockets

Pull 250 Watts, 250 Volts; Key 250 Watts, 250 Volts; Keyless 660 Watts, 250 Volts

EVB.	REFL	FCT	ADG
$r \cup r$	REFL		

Schedule "C"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List	W. E. List
3476	Pull 3 in. cast iron cap.	10 10	50 50	35 40	\$1.35 .85	\$1.88
3445	Key, ¾ in. cast iron cap. Keyless, ¾ in. cast iron cap.	10	50	30	80	1.12
3478 3479	Pull, ½ in. cast iron cap	10 10	50 50	35 40	1.35 .85	1.88 1.19
3410	Keyless, ½ in. cast iron cap	10	50	30	.80	1.12

All brass and aluminum porcelain socket caps listed elsewhere are interchangeable with above sockets. For sockets with either Nos. 150, 151, 152 or 153 caps listed elsewhere add to list \$0.21, Mfrs. List \$0.05. For sockets with either Nos. 154 or 155 caps listed elsewhere add \$0.42 to list. For sockets with No. 163 caps listed elsewhere add \$0.98 to list. For sockets with No. 173 caps listed elsewhere add \$0.70 to list. For sockets either Nos. 174,175, 176 or 177 caps listed elsewhere add \$0.98 to list.

#### WITH VENTILATED CORRUGATED COVER FOR PAINT ENAMELED REFLECTORS— STRAP HOLDER ATTACHED

FOR PORCELAIN ENAMELED REFLECTORS								
3453 Keyless, 1/2 in. iron cap with lock nut, for reflectors with 1/2 in. I extension.	2	50	60	\$1.22	\$1.70			
3454 Keyless, 1/2 in. iron cap with lock nut, for reflectors with 1 1/8 in. L-extension.	2	50	€5	1.24	1.74			
3455 Keyless, ½ in. iron cap with lock nut, for reflectors with 1½ in. L-extension.	2	30	70	1.26	1.76			
3455 Keyless, ½ in. iron cap with look nut, for reflectors with 2¼ in. Lextension.	2	30	80	1.30	1.82			
3459   Keyless, 16 in, iron cap with lock nut, for MB200 and MW200 reflectors	′ 1	20	85	1.45	2 02			

# Mogul Base Porcelain Sockets

For Reflectors. 1500 Watts, 250 Volts

With Cast Iron Cap-Strap Holder Attached

Schedule "C" e1 00 1

There applies on he furnished with \$4 inch 14 inch or \$4 inch aluminum annu					
3413   Keyless, 1/2 in. cast iron cap	2	20	35	l 1.80 l	2.52
5445   Neyless, % In. cast from cap		20	30	1 31.80 L	\$2.52

These sockets can be furnished with 1/2 inch, 1/2 inch or 1/4 inch aluminum caps instead of the standard cast iron. For sockets so equipped add \$0.70 to list.

#### WITH VENTILATED CORRUGATED COVER-STRAP HOLDER ATTACHED

3457	Keyless, 1/2 in. iron cap, lock nut, for reflectors with 11/2 in. L-extension	1	1 10	35	\$2.40	\$3.36
3458	Keyless, ½ in. iron cap, lock nut, for reflectors with 2 ¼ in. L-extension	1	10	35	2.50	3.50
3485	Kevless, 1/2 in. iron cap, lock nut, for MD1000 and MW1000 reflectors	1	10	50	3.10	4.34

# Corrugated Ventilated Globe Holders

Corrugated ventilated Globe Holders						Schedule "C"		
3480	3¼ in. holder and corrugated, ventilated cover for medium base porcelain	1	30		\$1.85	\$2.60		
3481	keyless socket, for ¾ in. pipe. 4 in. holder and corrugated, ventilated cover for medium base porcelain keyless socket, for ¾ in. pipe.	1	30		2.10	2.94		
3482	less socket, for ¾ in pipe.  6 in. holder and corrugated, ventilated cover for medium base porcelair keyless socket, for ¼ in. pipe.	1	20		2.50	3.50		
3483	keyless socket, for ½ in. pipe. 6 in. holder and corrugated, ventilated cover for porcelain Mogul socket, for ¼ in. pipe.	1	10		3.00	4.20		
3484	<ul> <li>½ in. pipe.</li> <li>8 in. holder and corrugated, ventilated cover for porcelain Mogul socket, for ½ in. pipe.</li> </ul>	1	10		3.50	4.90		

Standard finish, baked-on black Japan.

For holders, finished in Flemish brass, add the following to list price: No. 3480, \$2.30; No. 3481, \$2.80; No. 3482, \$3.84, \$3.84; No. 3484, \$5.60.

Glassware not furnished.

3412 | Keyless, 3s in. iron cap with lock nut.
3451 | Keyless, 12 in. iron cap with lock nut.

These globe holders are furnished complete with porcelain keyless sockets.

Holders with medium base sockets tapped for ½ in. pipe or holders with Mogul base sockets tapped for ½ inch pipe may ad without extra charge.

## **HUBBELL METAL REFLECTORS**







No. 5429 Half Tin Reflector

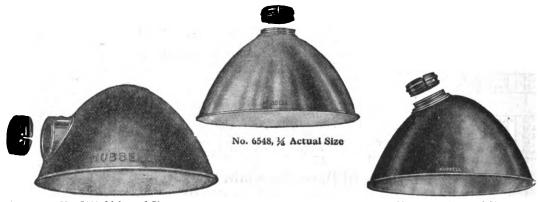
No. 6151

#### Half Reflectors

Tin, Brass and Aluminum

Schedule "C"

			Finish					
List No.	Description	Outside	Inside	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
5429 <sup>4</sup> 5532 <sup>4</sup>	Steel Brass	Green Old Brass	White Frosted Alum.	1 1	50 50	20 20	<b>\$0.50</b> .90	\$0.70 1.26
		]	For 10 and 15 V	att Lamp	8	·	Sched	ule "C"
6151 6152	Steel Brass	Green Old Brass	White Frosted Alum.	1	<b>50</b> <b>50</b>	20 20	<b>\$0.45</b> .85	\$0.63 1.19



No. 5461, 1/4 Actual Size

No. 6550, ¼ Actual Size

# Parabola Reflectors

WITH HOLDER AT SIDE

Schedule "C"

List No.	Description	Watts	Carton Quantity	Pkg. Wgt.,Lbs.	Std. Pkg.	Mfrs. List	W. E. List
5564	6½ in. steel, green outside, frosted inside	25-40-60	1	40	50	\$0.65	\$0.91
5571	6½ in. brass, brush brass outside, frosted inside.	25-40-60	1	40	50	1.50	2.10
5461	$ 6\frac{1}{2}$ in. aluminum, green outside, frosted inside.	25-40-60	1	30	50	1.20	1.68
WITH HOLDER AT TOP							
6094	16½ in. steel, green outside, frosted inside	25-40-60	1 1	35	30	\$0.65	\$0.91
6548	$6\frac{1}{2}$ in. brass, brush brass outside, frosted inside.	25-40-60	1	40	30	1.50	2.10
6549	$ 6\frac{1}{2}$ in. aluminum, green outside, frosted inside.	25-40-60	1	30	30	1.20	1.68
WITH HOLDER AT 30° ANGLE							
6550	16½ in. steel, green outside, frosted inside	25-40-60	1	35	30	\$0.65	\$0.91
6551	6½ in. brass, brush brass outside, frosted inside.	25-40-60	1	40	30	1.50	2.10
6552	$ 6\frac{1}{2}$ in. aluminum, green outside, frosted inside.	25-40-60	1	30	30	1.20	1.68
I	trace reflectors can be had in any desired special	finish Pri	cee on e	phlication			

Brass reflectors can be had in any desired special finish. Prices on application.

White interior furnished without extra charge.

Aluminum reflectors cannot be furnished in a plated finish.

If reflectors are desired for weatherproof sockets, place the letter "P" after the List No., and add \$0.18 to list price.

Parabola reflectors with perforated top, \$0.21 addition to list price. Digitized by

#### PORCELAIN ENAMELED STEEL REFLECTORS



No. 6322 Porcelain Enameled Steel Reflectors

WIDE DISTRIBUTING TYPE Schedule "C" Pkg. Wt. List No. W. E. List Carton Std. Mfrs. Description Watts Pkg. Lbs. Quantity List 14 in. reflector, green outside, white inside.
16 in. reflector, green outside, white inside.
18 in. reflector, green outside, white inside.
20 in. reflector, green outside, white inside.
14 in. reflector, green outside, white inside. \$2,35 2,75 3,00 3,65 1,20 \$3.30 3.86 4.20 5714 50 130 100 30 75 200 5716 5717 200 30 5 5 5 200-250 30 150 60 50 120

The above reflectors, except 14 inch size, are equipped with a strain relief attachment which prevents weight of reflector working shell about.

Paint Enameled ReflectorsPer							
	8 in. flat, green outside, white inside	15-25	10	100	40	\$37.50	\$52.50
	10 in. flat, gren outside, white inside	25-40	10	100	56	49.00	68.60
5433	12 in, flat, green outside, white inside.	40-60	10	100	80	70.00	98.00
5440	8 in. deep cone, green outside, white inside	15-25	10	100	58	46.00	64.40
5441	10 in. deep cone, green outside, white inside.	25-40	10	100	80	52.00	72.80
5442	12 in. deep cone, green outside, white inside	40-60	10	100	115	100.00	140.00



# Porcelain Enameled Steel Reflectors

List No.	Description	Watts	Carton	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List	W. E. List
6107	12 in. porcelain enameled steel, wide distribution, white outside, white inside.	40-60	5	50	75	\$1.35	\$1.90
5604	12 in. porcelain enameled steel, distributing, white outside, white inside.	40-60	5	50	105	1.60	2.24
5710	12 in. porcelain enameled steel, distributing, green outside, white inside.	40-60	10	50	90	1.75	2.46

**Bowl Type Extensive** 

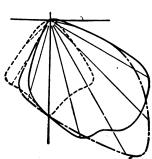
5860 | 6 in. porcelain enameled steel, green outside, white inside..... | 25-40 | 5 | 30 | 60 | \$1.50 | \$2.10

Note: If reflectors are desired for weatherproof socket, place the letter "P" after the list No. and add \$0.20 to list price with the exception of No. 5860, which is not furnished with "P" holder.

#### BENJAMIN INDUSTRIAL FIXTURES



List No. 5536



Representative Curves Elliptical Angle Reflectors



List No. 5538

# Elliptical Angle Reflectors KEY TO DIAGRAM 0° angle, or directly in front of unit.

Schedule 2

----- = 0° angle, or directly in front of unit.
----- = 40° angle, with vertical plane above.

----- 90° angle, or through plane parallel to wall. Tests made with 500 watt lamp.

. The development of the elliptical angle reflector has proceeded with one end in mind—an even distribution of light from an angular position over certain vertical and horizontal areas. Maximum is at 35 degrees vertical and 40 degrees horizontal angles—not directly in front, but at the side. Illumination is thus built up at a point heretofore weak—midway between units. Lamps should hang vertical.

SPECIFICATIONS FOR BULLETIN, BILL AND SIGNBOARD ILLUMINATION Mounting dimensions based on lamp filament centers.

List No. Height of Size of Lamps -Mounting Dimensionsof Unit Board Watts Apart Out Above Top \*5522 3-5 ft. 40, 60 4 ft. ft. 1 ft. 6-8 ft. 5525 100 ft. 5 5 1 ft. ft. 5525 9-12 ft. 200 612 ft. 6½ ft. ft. 6½ ft. 6½ ft.  $6\frac{1}{2}$  ft. 5536 9-12 ft. 200 ft. 5527 9-12 ft. 200 6½ ft. ft. \*5527 13-15 ft. 250 8 8 2 ft. ft. ft. 5537 300 8 8 13-15 ft.  $ar{2}$ 400 10 10 5537 16-18 ft. ft. ft. ft. 19-21 ft.  $ar{2}$ 12 5537 500 10 ft. ft. ft. 5538 22-25 ft. 750 0 15 ft. ft. 26-30 ft. 5538 1000 ft. ft. ft.

\*See listing elsewhere.
Fixture 5525 has enameled steel reflector and hood. Size makes ventilation unnecessary. Fixtures 5536-5538 have enameled steel reflector and copper hood properly ventilated. All have two piece, easy-to-wire porcelain socket with Benjamin lamp grip. Height dimensions include vertical fitting tapped ½ inch; ¾ inch or 1 inch may be ordered at an advance of \$0.21 list. Mfrs. List \$0.15. Angle fittings may be substituted at the price of corresponding vertical fittings. Standard finish is black.

Schedule 2

be substituted	i at the price of	corresponding vertical fittings.	Standard Inish is	DIACK.	Scheaule 4
List	Height of	Diameter of	Size of Lamps	Mfrs.	W. E. List
No.	Fixture	Reflector	Watts	List	Price
5525	$13\frac{1}{8}$ ins.	$8\frac{1}{2} \times 13\frac{1}{2}$ ins.	100, 200	<b>\$</b> 3.00	<b>\$4</b> .20
5536	$17\frac{1}{2}$ ins.	$14 \times 20$ ins.	200	6.00	8.40
5537	19 ins.	$14 \times 20$ ins.	300, 400, 500	6.50	9.10
<b>5538</b>	$21\frac{1}{2}$ ins.	14 x 20 ins.	750, 1000	6.80	9.52

Elliptical angle reflectors are particularly applicable to the lighting of large open areas: outdoors—for tennis courts, athletic fields, bathing beaches, sign and billboards; indoors—for foundries, erecting shops, large mills of various kinds, or for any condition where it is not possible or desirable to hang the lighting unit directly over the area or work to be lighted.

Prices are less wires and lamps.

Sockets are National Electrical Code Standard.



Angle Reflector List No. 5527

#### Angle Reflectors

Schedule 2

Angle reflector sockets 5522-5527 consist of elliptical enameled steel reflector, and two-piece easy to wire porcelain socket with Benjamin lamp grip. Regularly furnished with vertical fittings tapped ½ inch, but ¾ inch or 1 inch fittings can be obtained at an advance of \$0.21 list. Mfrs. List \$0.15. Corresponding size angle fittings may be supplied without change in price. For ventilated angle reflectors, photometric and installation data see below. Standard finish is black outside.

List	Size	of Reflector——	Size of Lamps	Mirs.	W. E. List
No.	Height	Diameter	Watts	List	Price
5522	13½ ins.	$8\frac{1}{2} \times 13\frac{1}{2}$ ins.	60, 175	<b>\$2.80</b>	\$3.92
5525	17½ ins.	$8\frac{1}{2} \times 13\frac{1}{2}$ ins.	100,/200	3.00	4.20
5527	$11\frac{3}{8}$ ins.	14 x 20 ins.	iitize <b>200, 250</b>	) Q 6@00	8.40

#### BENJAMIN LIGHTING FIXTURES



List No. 6139

List No. 6109

List No. 6129

# Fixtures for Mazda "C" Lamps

Sockets are National Electrical Code Standard

#### SHALLOW BOWL REFLECTORS AND SKELETON HOLDERS Schedule 2

Fixtures 6115-6230 have enameled steel reflector of indicated design and dimensions, skeleton holder, and two piece easy to wire porcelain socket with Benjamin lamp grip. Holders are tapped ½ inch. For other fittings see fixture below.

They are intended for service where hood is unnecessary, and a maximum amount of ventilation is desired. Standard finish is black enamel.

List No.	Description	Size of Reflector	Size of Lamps Watts	Mfrs. List	W. E. List Price
6115	Shallow bowl		200	\$4.00	\$5.60
6125 6130	Shallow bowlShallow bowl		300, 400, 500 750, 1000	4.60 6.00	6 . 44 8 . 40
6228	Flat cone	16 ins.	200	4.00	5.60
6229 6230	Flat cone		300, 400, 500 750, 1000	4.60 5.00	6.44 7.00

#### FLAT CONE REFLECTORS

Fixtures 6108-6148 have flat cone enameled steel reflector, ventilated hood, and lamp grip socket as above. Fitting is tapped ½ inch. For ¾ inch, add \$0.14 list. Mfrs. List \$0.10. For 1 inch or 1¼ inch, add \$0.21 list. Mfrs. List \$0.15. Standard finish is black enamel.

List No.	Description	Size of Reflector	Size of Lamps Watts	Mfrs. List	W. E. List Price
6144 6145	Copper hood		200	\$5.00	<b>\$7.00</b>
6146	Steel hood		200 300, 400, 500	4.40 5.70	6.16 7.98
6148 6108	Steel hood		300, 400, 500	5.00 6.90	7.00 9.66
6109	Copper hood		750, 1000 750, 1000	5.70	7.98

Prices are less wires and lamps.

#### Shallow Bowl Reflectors

Fixtures 6126-6135 have shallow bowl enameled steel reflector, ventilated hood and two piece easy to wire porcelain socket with Benjamin lamp grip. The reflector is easily removed to facilitate wiring. Fittings tapped 1/2 inch.

For fixture with ½ inch suspension fitting No. 6031M, add \$0.91 list. Mfrs. List \$0.65. With fitting No. 6049M, add \$1.12 list. Mfrs. List \$0.65 Standard finish is black enamel.

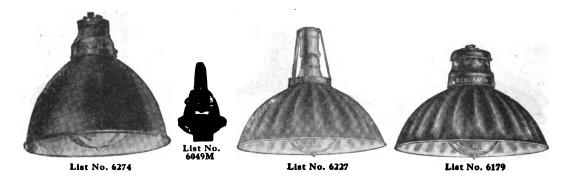
List No.	Description	Size of Reflector	Size of Lamps Watts	Mfrs. List	W. E. List Price
6134	Copper hood	16 ins.	200	<b>\$</b> 5.00	\$7.00
6135	Steel hood		200	4.40	6.16
6126	Copper hood	18 ins.	300, 400, 500	5.90	8.26
6127	Steel hood	18 ins.	300, 400, 500	5.20	7.28
6128	Copper hood	20 ins.	<b>750, 1000</b>	8.25	5.78
6129	Steel hood		<b>750</b> , 1000	7.10	4.97

NOTE: If it is desirable to consolidate, descriptions can be briefed under top listing as there is a similarity in wording, as shown by:

Hooded fixtures below have adequate ventilation and are tapped for ½ inch suspension. For ¾ inch add \$0.14 list. Mfrs. List \$0.10. For 1 inch or 1½ inch, add \$0.21 list. For fixture with No. 6031M fitting, add \$0.91 list. Mfrs. List \$0.65. With No. 6049M add \$1.12 list. Mfrs. List \$0.65. Fixtures for 200 watt lamps have two piece, easy to wire porcelain socket with lamp grip, medium base; 300 watt and over have same in Mogul base. Standard finish is black enamel.

Prices are less wires and lamps.

#### BENJAMIN LIGHTING FIXTURES



#### Fixtures For Mazda "C" Lamps

Schedule 2

#### DEEP BOWL REFLECTORS

Fixtures 6265-6274 have deep bowl enameled steel reflector with ventilated hood as indicated, and twopiece easy-to-wire porcelain socket with Benjamin lamp grip. Goods are tapped 1/2 inch, but 3/4 inch may be ordered at an advance of \$0.14 list; Mfrs. List \$0.10; 1 inch or 11/4 inch, at an advance of \$0.21 list; Mfrs. List \$0.15. Reflector is easily removed to facilitate wiring. For fixture with suspension fitting 6031M, add \$0.91 list; for 6049M, add \$1.12 list. Standard finish is black enamel.

List	•	Size of	Size of Lamps	Mfrs. List	W. E. List
No.	Description	Reflector	Watts	Price	Price
6265	Copper hood	. 12 ins.	200	<b>\$</b> 4.30	\$6.02
6266	Steel hood	. 12 ins.	200	3.80	5.32
6267	Copper hood	. 12 ins.	300, 400, 500	4.80	6.72
6268	Steel hood	. 12 ins.	300, 400, 500	4.00	5.60
6273	Copper hood	. 15 ins.	750, 1000	6.70	9.38
6274	Steel hood	. 15 ins.	750, 1000	5.60	7.84

Fixtures 6222-6227 have enameled steel reflector of indicated design and dimensions, skeleton holder, and two-piece, easy-to-wire porcelain socket with Benjamin lamp grip. Holders are tapped ½ inch. For further description of reflectors, see fixtures above and below. Standard finish is black enamel.

List		Size of	Size of Lamps	Mfrs. List V	V. E. List
No.	Description	Reflector	Watts	Price	Price
6222	Deep bowl	12 ins.	200	<b>\$</b> 3.40	\$4.76
6223	Deep bowl	12 ins.	300, 400, 500	3.50	4.90
	Deep bowl		750, 1000	4.70	6.58
	Deep bowl, fluted		200	4.90	6.86
6226	Deep bowl, fluted	14 ins.	300, 400, 500	5.00	7.00
6227	Deep bowl, fluted	17 ins.	750, 1000	5.90	8.26

#### FLUTED BOWL REFLECTORS

Fixtures 6066-6179 have a highly efficient deep bowl fluted reflector. An increased diffusing and reflecting surface is secured, and the light distributed without being intercepted by the bulb. A loss of approximately 12 per cent. through bulb absorption is thus eliminated. Hoods are tapped ½ inch. Other details follow fixtures above. Standard finish is black enamel.

List No.	Description	Size of Reflector	Size of Lamps Watts	Mfrs. List Price	W. E. List Price
6066	Copper hood	14 ins.	200	<b>\$</b> 5.90	\$8.26
6 <b>0</b> 67	Steel hood	14 ins.	200	5.40	7.56
6068	Copper hood	14 ins.	300, 400, 500	6.40	8. <b>96</b>
6069	Steel hood	14 ins.	300, 400, 500	5.60	7.84
6178	Copper hood	17 ins.	750, 1000	7.80	10.92
6179	Steel hood	17 ins.	750, 1000	<b>6</b> <sub>⊩</sub> 70	9.38
P	rices are less wires and lamps.	Dig	itized by GO(	ogie	

#### MISCELLANEOUS REFLECTORS



#### Reflectors

Schedule 4

Reflectors H-410-H-518 are porcelain enameled steel, green outside, white inside, and have heel to fit standard shade holders.

			FLAT CONE			
List No.	Size of Reflector	Size of Holder	Std. Pkg.	Weight Lbs.	Mfrs. List Price	W. E. List Price
H-508 H-510 H-512 H-515 H-518	8 ins. 10 ins. 12 ins. 15 ins. 18 ins.	2½ ins. 2½ ins. 2¼ ins. 3¼ ins. 3¼ ins.	10 10 10 10 10	5 6 10 12 26	\$0.50 .60 .80 1.20 1.70	\$0.74 .89 1.18 1.78 2.52
H-410	10 ins.		HALLOW BOW		\$0.70	\$1.04
H-412 H-414 H-416 H-418	12 ins. 14 ins. 16 ins. 18 ins.	2¼ ins. 2¼ ins. 2¼ ins. 3¼ ins. 3¼ ins.	10 10 10 10	13 15 19 36	.90 1.10 1.50 1.90	1.33 1.63 2.22 2.81

Reflectors H-10-H-24 are porcelain enameled steel, green outside, white inside, tapped for iron pipe stem.

List No.	Size of Reflector	Stem Size	Std. Pkg.	Weight Lbs.	Mfrs. List Price	W. E. List Price
H-10	10 ins.	½ in.	10	7	<b>\$</b> 0.8 <b>0</b>	\$1.18
H-12	12 ins.	$\frac{1}{2}$ in.	10	12	1.00	1.48
H-15	15 ins.	$\frac{1}{2}$ in.	10	16	1.30	1 92
H-18	18 ins.	$\frac{1}{2}$ in.	10	21	1.80	2.66
H-20	20 ins.	$\frac{1}{2}$ in.	10	31	2.50	3.70
H-24	24 ins.	$\frac{1}{2}$ in.	10	40	3.50	5.18

Reflectors TN-114-TN-214 are paint enameled tin, green outside, white inside, fit the cluster back, and require no holders.



#### ENAMELED TIP

List	Size of	Type of	Std.	Weight	Mfrs. List	W. E. List
No.	Reflector	Cluster	Pkg.	Lbs.	Price	Price
TN-114	14 ins.	1, 7 or K	10	7	<b>\$</b> 0.60	\$0.89
TN-214	14 ins.	2	10	7	.60	.89
TN-116	16 ins.	1, 7 or K	10	7	.70	1.04

Reflectors H-115-H-813 are porcelain enameled steel, white both sides, fit the wireless cluster back, and require no holders. Nos. H-316 and H-318 have deep neck.

		ENAME	LED STEEL	•		
H-813	13 ins.	8	10	11	\$1.20	\$1.77
H-115	15 ins.	1, 7 or K	10	12	1.20	1.77
H-215	15 ins.	2	10	12	1.20	1.77
H-118	18 ins.	1. 7 or K	10	14	2.00	2.96
H-316	16 ins.	3T	10	20	1:80 I	2.66
H-318	18 ins.	<b>3T</b>	10	<b>25</b> Digitize	ed by <b>2</b> 100910	3.11
			98-5	Lig	hting Fixtures and Ad	cessories

# X-RAY STORE WINDOW SEARCHLIGHTS

(STANDARD FOR SHOW WINDOW LIGHTING)
In the design of these reflectors sufficient room has been allowed for cleaning without removing lamps from reflectors, thus reducing the lamp breakage to a minimum.

The inside glass protection to the silver plating is easily cleaned by simply wiping (inside of reflector only) with a damp cloth. They need not be cleaned as frequently as other types, and should never be immersed in water.



Jupiter No. 610



Jove No. 600

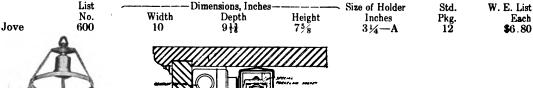
The Jupiter

FOR 100 WATT MAZDA C LAMPS
The "Jupiter," a more concentrating reflector than the "Jove," is used for the brilliant illumination of show windows whose height equals above twice their depth.

	List	D	imensions, Inche	s	Size of Holder	Std.	W. E. List
Jupiter	No. 610	Width 10	Depth 101/8	Height 75%	Inches 31/4—A	Pkg. 12	Each \$6.80

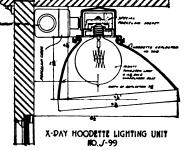
The Jove FOR 100 WATT MAZDA C LAMP

The "Jove" is a scientifically correct window lighting reflector with a high temperature backing, designed especially for use with a 100 watt gas-filled Type C lamp.





Jumbo





S-99 Hoodette

The Jumbo FOR DIRECT LIGHTING-WITH SPECIAL HOLDER For 500, 750 and 1000 Watt Mazda C Lamps

The Jumbo is designed for the illumination of very large interiors, such as armories, coliseums, erecting shops, etc. List No. Each 53 unit No. 770 reflector and holder arranged for 500 watt Mazda C lamp, each...... \$42.50 54 unit No. 770 reflector and holder arranged for 750 and 1000 watt Mazda C lamp, each.... 42.50 Units are complete as shown in illustration.

#### Hoodette for Wall Cases

The Hoodette is placed at the inside upper front edge of the case where it is hidden by the framework. The socket, which is the same type as used with the Scoopette, takes a small 15 watt lamp. We cannot over-emphasize the great saving in cost the use of these lamps makes possible with Scoopette and Hoodette equipment.

DESCRIPTION

Height, including socket, 41/8 inches. Depth, front to back, 53/8 inches. Width of reflector, 31/4 inches For 15 watt G-16½ candelabra base lamp. Holder, special supplied with reflector. Standard package quantity 10. Shinning weight of standard package quantity, 10 lbs. W. E. List List No. Eacb

S-99 Hoodette unit including reflector socket, socket cover, shade holderd by LTOOQL Lighting Fixtures and Accessories 135 & 139

#### X-RAY STORE WINDOW SEARCHLIGHTS



Scoop No. 777 For Square Windows



Hood No. 730 For Shallow Windows

#### Scoop Reflector

The scoop reflector was designed for windows of medium size where the depth is approximately equal to the height. With this reflector the 60 watt lamp gives the best results. This reflector gives a downward light of 275 candle power and throws very little light out on to the sidewalk.

List		Dimensions, Inch	es	Size of Holder	Std.	W. E. List
No.	Width	Depth	Height	Inches	Pkg.	Each
777	9	71/2	63/4	2¼—O	16	<b>\$</b> 5.10

#### **Hood Reflector**

This hood reflector is designed to light low, shallow windows as efficiently as the helmet lights higher windows of the same type. The design of this hood reflector is such as to produce a high concentration in the window—cutting the light off sharply at the window plate.

The hood closely follows correct window lighting principles. It is installed at the ceiling near the glass front, hides the lamp and practically eliminates unpleasant glare.

List		-Dimensions, Inch	es	Size of Holder	Std.	W. E. Reflector
No.	Width	Depth	Height	Inches	Pkg.	Only
730	9	91/8	<b>5</b> ½	21/4—O	15	<b>\$5.10</b>



Poke Bonnet No. 750 For Low, Deep Windows



#### Poke Bonnet Reflector

This is a sectional trough reflector with an adjustable holder which is easily attached to either the ceiling or transom bar. The lamps are held in this reflector by a nickel-plated twin socket. The largest lamp bulb which can be used in this reflector is a 60 watt Mazda lamp.

This reflector is especially adapted to the lighting of low, deep windows, where the reflectors cannot be placed more than 6 to 10 feet above the bottom of the window.

List	Size	Std.	W. E. List
No.	Inches	Pkg.	Complete
750	$14 \times 7 \times 3\frac{1}{4}$	8	\$11.04

#### Midget Reflectors

It uses the 25 watt tubular Mazda lamp, and is the ideal reflector for lighting display cases, small store windows, wall cases, cornices, pictures, etc. Shade holder is supplied with this reflector.

List	Dimensio	ons, Inches	Size of Holder	Std.	W. E. List With Holder
No.	Length	Height	Inches	P,kg. ⊤	Each
510	63/8	13/4	15/8	Digitized by 36 OOSIC	\$1.98
		136		Lighting Fixtures and	Accessories

#### X-RAY REFLECTORS

#### FOR DIRECT LIGHTING



No. 555 A Small Distributor Using 25, 40, 50 and 60 Watt Lamps

No. 570 A Distributor Using 100 Watt Mazda B or C Lamps



No. 575 A Distributor Using 200 Watt Mazda C Lamps

#### Distributing Reflectors

The X-Ray line of distributing reflectors, known as the Beehive type, are designed along the latest scientific lines. They give a wide spread of light and hide the lamp from view without sacrificing the efficiency. This line is especially well adapted for the illumination of factories, shops of all kinds, gymnasiums, armories, indoor ball and tennis courts, pressrooms, power houses, foundries, etc.

List	Dimensio	ns, Inches	Size of Holder	Size of Lamp	Std.	W. E. List
No.	Diameter	Height	Inches	Watts	Pkg.	Each
555	63/8	$5\frac{1}{8}$	$2\frac{1}{4}$	25, 40 and 60	36	\$1.70
570	7 1/8	$6\frac{7}{8}$	$3\frac{1}{4}$ —A	100—B or C	16	2.98
575	93/8	8	31⁄4—A	200—C	8	4.08



No. 700 A Semi-Concentrator Using 100 Watt Lamps



Concentrator Using 25, 40, 50, and 60 Watt Lamps



No. 710 A Concentrator Using 200 Watt Mazda C Lamps

#### Semi-concentrating Reflectors

The No. 700 reflector, which is similar in design to the No. 696, as illustrated, is called a semi-concentrating reflector because it does not spread the light as far as the distributing reflectors, and yet does not confine the light into such a small area as do the concentrating reflectors shown. The No. 700 reflector is used with a 100 watt lamp.

List	————Dimension	ns, Inches———	Size of Holder	Size of Lamp	Std.	W. E. List
No.	Diameter	Height	Inches	Watts	Pkg.	Each
700	10	$5\frac{1}{2}$	21/4	100—B `	18	<b>\$2.56</b>

#### Concentrating Reflectors

The concentrating reflectors should be used whenever a very intense light is wanted over a small area such as over desks, counters, special machinery, etc.

The small reflector, No. 696, will take care of the 25, 40, 50 and 60 watt sizes, while No. 710 was designed for 200 watt Type C lamps.

List	Dimension	s, Inches	Size of Holder	Size of Lamp	Std.	W. E. List
No.	Diameter	Height	Inches	Watts	Pkg.	Each
696	8	5	21/4	25, 40, 50 and 60	24 T	<b>\$2</b> .12
710	$11\frac{1}{2}$	63/4	$3\frac{1}{4}$	<b>25, 40, 50 and 60</b> <b>200—⊃C</b> itized by	G06816	4.26

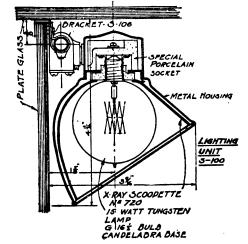
Lighting Fixtures and Accessories

#### SCOOPETTE FOR SHOW CASES

The Scoopette was designed primarily for showcase lighting. It is used with the equipment, complete from floor outlet to lamp, as shown. Any show case can be lighted with Scoopettes.

The problems which have been successfully solved in the development of this equipment are: The least possible obstruction to a clear view of the interior of the case; even and efficient illumination with complete concealment of lamp; low current consumption and maintenance; smallest possible amount of heat in case; reasonable cost and expense of illumination; absolute safety from fire risks; com-

plete equipment, floor outlet to lamp.



Lighting Unit No. S-100

#### Scoopette Lighting Unit

W. E. List Price Each

List No. S-100

Scoopette Lighting Unit including reflector socket and cover housing for reflector and special clip....

# Complete Show Case Lighting Outfits

The list prices given are for finished material necessary for equipping square end cases of various sizes mentioned with number of Scoopettes specified. Material includes a special insulating joint, a push button switch, a special switch box, which is easily installed, all tubing, elbows, T fittings, Scoopettes, straps or brackets for supporting tubing, cap for end of tubing and sufficient special flexible No. 18 stranded wire to wire entire case. Prices do not include assembling, wiring, installing or lamps.

#### Table of List Prices and List Numbers

Wood frame or all glass cases having square ends.

List No.	Length	Number	Degrees	Overall Length	W. E. List
for Back	of	of	of	Including	Complete
Entrance	Case	Scoopettes	Brightness	Elbow and Cap	Outfit
S-46G-2	4 ft.	2	Bright	$45\frac{7}{8}$ ins.	<b>\$</b> 24.14
S-70G-2	6 ft.	2	Average	$69\frac{7}{8}$ ins.	25.00
S-70G-3	6 ft.	3	Bright	$69\frac{1}{8}$ ins.	30.94
S-70G-4	6 ft.	4	Very bright	$68\frac{3}{8}$ ins.	37.14
S-94G-3	8 ft.	3	Average	$93\frac{1}{8}$ ins.	31.62
S-94G-4	8 ft.	4	Bright	$92\frac{3}{8}$ ins.	38.20
S-94G-5	8 ft.	5	Very bright	$93\frac{3}{8}$ ins.	43.86
S-118G-4	10 ft.	4	Average	$116\frac{3}{8}$ ins.	<b>38</b> .68
S-118G-5	10 ft.	5	Bright	$117\frac{5}{8}$ ins.	44.80
S-118G-6	10 ft.	6	Bright	$116\frac{7}{8}$ ins.	51.26
S-118G-7	10 ft.	7	Very bright	$117\frac{5}{8}$ ins.	58.22
S-142G-5	12 ft.	5	Average	$141\frac{5}{8}$ ins.	45.82
S-142G-6	12 ft.	6	Bright	$140\frac{7}{8}$ ins.	51.86
S-142G-7	12 ft.	7	Bright	$140\frac{1}{8}$ ins.	58.56
S-142G-8	12 ft.	8	Very bright	$141\frac{3}{8}$ ins.	64.26

The prices given above are for stock outfits, including stock lengths of  $\frac{3}{6}$  inch No. 18 gauge brass the prices given above are for stock outsits, including stock lengths of %8 inch No. 18 gauge brass tubing, finished. In some cases it may be necessary to cut tubing to insure that the outsit fits the case properly. The charge for cutting, threading and reaming is 17 cents per tube. If tubing cannot be run straight through the back post, offset fitting No. S-103 is necessary, add \$1.19 list to price given. Above list prices are based on equipments for cases 24 inches wide and 30 inches high, inside measurements. Where cases are wider than 24 inches or higher than 30 inches, inside measurements, add 5 cents list for every 2 inches or freetien thereof

5 cents list for every 2 inches or fraction thereof.

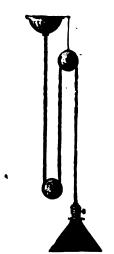
We can supply from stock equipment for curved and odd length cases.

If the show cases in which the Scoopette equipment is to be installed do not conform with the standard sizes given in the tables, send for the special dimension blank so as to give exact information. This is very necessary to insure that the equipment will exactly fit the case.

#### LIGHTING ACCESSORIES







Electric Adapter

Two Ball Adjuster

The device consists of an attachment or ferrule which is easily adjusted to fit any size candlestick. On this is fastened a Cutler hammer push button socket. Covered cord and Benjamin No. 903 attachment plug. The socket is equipped with 6 feet of parallel silk through brass. Six of these devices packed in a carton.

List Price Per Doz. \$20.00

#### Two Ball Cord Adjusters

This is a mechanical appliance for automatically taking the slack off a drop-light and permitting its being extended to three times its length. It consists of an upper and lower ball each concealing a porcelain pulley; the lower ball acts as a counter balance to the lamp.

Style A, finished gold bronze, aluminum, and black.

Style	B, finished plain brass, oxidized brass, and nickel plated.	List Price
List No.	·	Each
420908	Style A "Two Ball" Adjuster.	\$2.00
420909	Style B "Two Ball" Adjuster,	2.80
420910	Special Finish Style A	2.40
420911	Special Finish Style B	3.00
Adjus	sters equipped with lead balls to carry heavy shades or special lamps, add 60 cents to the	list price.

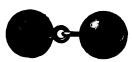




No. 2608







No. 6778

Cord Adjusters



No. 5403

List		——List P	rice ——
No.		Each	per 100
1403	Black Enamel, for % inch cord, ball adjuster	<b>\$</b> 0.05	\$1.50
4635	Black Enamel, for 1/2 inch cord or reinforced, ball adjuster		3.50
6778	For 1/8 inch cord (wood), two ball adjuster	.25	9.00
5044	Black Enamel, for % inch cord (wood), dumb bell adjuster	. 15	6.00
2608	Shellac Finish (wood), 1/2 inch cord, dumb bell adjuster	.08	3.00
5559	Q. & S. Cord Adjuster, red fibre, for 1/2 inch cord	. 05	1.50
5403	Stewart Cord Adjuster, for Lamp Cord	05,	12.00
• • • •	Stewart Cord Adjuster, for Lamp Cord. Stewart Cord Adjuster, for Show Window Cord.	OGSIC	60.00

Lighting Fixtures and Accessories

75 & 76

#### SILK SHADE

PORTABLE LAMPS



#### Portable Mahogany Lamps

The stands of these lamps are of solid mahogany, well finished and of selected stock. Each lamp is fitted with  $\frac{1}{2}$  inch iron pipe from top to bottom, which insures the socket always being tight. It also prevents the wooden shaft from warping.

The shades are of one layer of heavy silk poplin and are trimmed with metal galloon of popular width and design. These shades can be furnished in any of the following four colors: gold, old rose, nile green and pink. They are made on tinned wire frames and all joints soldered, and all wires are wrapped in the same color of material as the shade.

Type No. 15. This is a desk or boudoir lamp equipped with one pull chain socket, six feet of silk parallel cord and attachment plug. The total height of the lamp and shade is 15 inches and the diameter of base is 5 inches. The diameter of the shade is 8 inches, and a spring fixture to fit over the lamp bulb is included.

Type No. 25. This is a table lamp, equipped with one pull chain socket, six feet of silk parallel cord and attachment plug. The total height of the lamp and shade is 20 inches and the diameter of base is  $6\frac{1}{2}$  inches. The diameter of the shade is 14 inches, and a spring fixture to fit over the lamp bulb is included It may be used as a reading lamp when equipped with a 40 watt tungsten lamp.

Type No. 35. This is a library lamp equipped with two pull chain sockets, six feet of silk parallel cord and attachment plug. The total height of the lamp and shade is 28 inches and the diameter of base is 8 inches. The diameter of the shade is 18 inches. The shade attaches solidly to the cluster box on top of the lamp and is held in place by a brass knob.

List No.	Description	-Retail P	rices Each-	List Pri Lots of 3 La	ce Each— ots of 1 Doz.
15	Portable complete with cord shade and plug	<b>\$</b> 5.25	\$10.00	<b>\$</b> 8.30	\$7.70
25	Portable complete with cord shade and plug	8.25	16.00	13.60	12.90
35	Portable complete with cord shade and plug	12.00	<b>24</b> . <b>00</b>	20.50	19.90

Note: Each base is packed in a separate box and each shade is packed in separate box. Portables Nos. 1, 2 and 3 may be assorted.

Delivery F. O. B. New York City. For warehouse deliveries write near at house.

#### LIGHTING SPECIALTIES

# Parameter and pa

Wallace Portable Lamp

#### WALLACE PORTABLE LAMP

This cut shows assembled and collapsed views of the Wallace Portable Lamp.

The collapsed view shows how readily it can be packed in a trunk or grip. It is equipped with a spiral spring concealed in the base by means of which the lamp may be hung or attached to any desired object and with a rubber suction cap for holding it to window panes, mirrors and other non-porous surfaces. The socket is connected to the base by a screw connection which allows an angle adjustment of 180 degrees. This makes it possible to keep the lamp vertical with the base in any position. It is equipped with a push button socket, gray button for "On," black button for "Off." This lamp will stand anywhere or you can hang or stick it any place. Also the lamp and shade can be tilted up or down or sideways. It is finished in either brush brass, nickel or bronze finish. It is furnished with a 10 foot cord and Benjamin 903 Plug.







Showing Clamp and Socket



Showing



List Price

Each

\$5.00

Adapt-A-Lite Ball and Socket

# The Adapt-A-Lite

The Adapt-A-Lite is an electric lighting appliance consisting of a handsomely finished brass ball, containing a winding mechanism and a drum, with a capacity of 10 feet of insulated lamp cord. This light stays "put" at any fraction of the cord length, and a slight pull operating the release draws the cord gently into the device and lands the lamp without jar. The lamp does not revolve, nor does the cord twist during the winding operation. The device screws into the fixture socket in place of lamp, and there it conveniently remains, instantly available whenever an emergency demands a portable light. In addition to the portable equipment each Adapt-A-Lite is furnished with a metal shade and universal clamp which furnishes a support for the lamp and provides means for hanging from the side walls, frame of the bed or allows it to be clamped to the outer edge of desk or table when the cord is extended. By manipulating the shade the eye can be shielded from lamp glare as the light may be thrown in any desired direction. The Adapt-A-Lite may be attached to any socket. It is always in place and after momentary use need not be stored in some out-of-the-way place.

	Each	Each
Adapt-A-Lite clamp socket and shade, brush brass finish	<b>\$</b> 3.50	<b>\$7</b> .00
Ball and socket only	2.50	5.00
Universal clamp only	.75	1.50
Adjustable shade only	.50	1.00
Note: The price of the Adapt-A-Lite is less lamp.	oogle	

# FARIES ADJUSTABLE FIXTURES **Desk Portables**



No. 3184

No. 1012 ADJUSTABLE PORTABLE Made with large tubing and adjustable to any position

			,		L	ist Price Ea	ich
Liss No.		Height	Finish	Std. Pkg.	Less Than 3	3 to 12	12 and Over
1012	Adjustable Portable	18 ins.	Brush brass	12	\$3.20	\$2.00	\$1.80
1012	Adjustable Portable	18 ins.	Ox. copper	12	<b>3</b> . $52$	2.20	1.98
3187	Combination Portable and Bracket	11 ins.	Brush brass	12	2.60	1.50	1.35
3187	Combination Portable and Bracket	11 ins.	Ox. copper	12	4.06	3.38	3.16
3184	Adjustable Portable	9 ins.	Brush brass		10.20	7.80	7.20
3184	Adjustable Portable	9 ins.	Ox. copper		11 80	8.58	7.92

#### Desk Portables



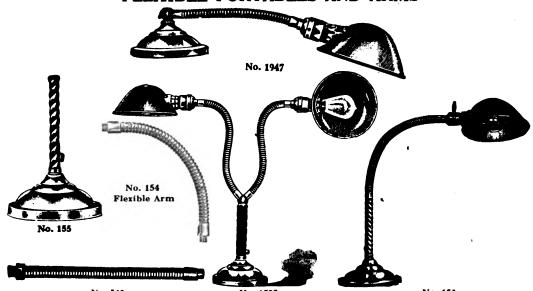
No. 1857

# No. 1857 SWINGING PORTABLE

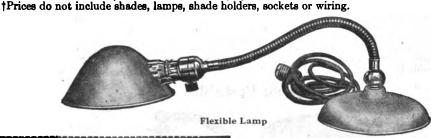
List	th state base and glass nood, white inside, green outside.		Std.	List Price Each		
No.		Finish	Pkg.	Wired		
1857	Swinging Portable, wired	Brush brass	6	\$9.80		
1857	Swinging Portable, wired	Ox. copper	6	10.78		
Delivery F. O. B. Factory, Decatur, Ill. For warehouse deliveries write nearest house.						

Digitized by Lighting Fixtures and Accessories 19 & 26

#### FLEXIBLE PORTABLES AND ARMS



	No. 540 No. 1532 No. 153		
List	Flexible Portables and Arms	Std.	‡List Price
No.	Extends Finish	Pkg.	Each
1947	Flexible Portable, 9 in. flexible tube 20 ins. Brush brass	6	<b>\$</b> 3.00
1947	Flexible Portable, 9 in. flexible tube Ox. copper	6	3.30
T	furnished with 9 feet reinforced silk cord, socket and plug, add \$2.00 to list.		
153	Flexible Portable 26 ins. Brush brass	12	†3.16
153		12	†3.48
†1532	Portable, extends any direction 34 inches. Height 26 inches Brush brass	6	4.46
†1532		6	4.90
	or 1532 wired with 9 feet silk cord, socket and plug, add \$2.68.		•
155	Flexible, portable base, height 8 in Brush brass	12	1.68
155	Flexible, portable base, height 8 in Ox. copper	12	1.84
540	Flexible arm 12 in., male thread each end, 3/8 in. iron Brush brass	•••	2.16
540	Flexible arm 15 in., male thread each end, 3/8 in. iron Brush brass	• •	2.64
540	Flexible arm 18 in., male thread each end, $\frac{3}{8}$ in. iron Brush brass	• •	3.24
154	Flexible arm 9 in., male thread each end, 1/8 in. iron Brush brass		1.20
154	Flexible arm 12 in., male thread each end, ½ in. iron Brush brass	• •	1.44
154	Flexible arm 15 in., male thread each end, ½ in. iron Brush brass	• • •	1.76
154	Flexible arm 18 in., male thread each end, $\frac{1}{2}$ 8 in. iron	• • •	2.16
154	Flexible arm 24 in., male thread each end, 1/8 in. iron	• • •	2.88
103	ricable arm 21 m., male unead each end, 78 m. non Drush brass	• •	2.0



# Flexible Arm for Portable Lamps

#### 1784484221

Flexible Arm for Factory Lighting Almond Flexible Portables and Arms List No.
12 With 12 in. Almond Flexible Arm.... \*List Price Each With 6 in. elevated stem, 9 in. Almond Flexible Arm. 8.00

Flexible Arms for portable lamps; ½ inch pipe thread each end. Has ½ inch hole all the way through.
Flexible Arms for factory lighting; ¾ inch pipe thread each end. Has ¾ inch hole all the way through.
6 in. Flexible Arm. ...\*List Price Each \$1.30 | 15 in. Flexible Arm. ...\*List Price Each \$2.20

9 in. Flexible Arm. ...\*List Price Each 1.50 | 18 in. Flexible Arm. ...\*List Price Each 2.70

12 in. Flexible Arm. ...\*List Price Each 1.80 | 24 in. arm and longer, \$1.80 per foot.

NOTE: Arms for portable lamps and factory lighting are the same price.

\*Delivery F. O. B. Factory, Ashburnham, Mass. For warehouse deliveries, write nearest house.

†Delivery F. O. B. Factory, Decatur, Ill. For warehouse deliveries write nearest house.

Lighting Fixtures and Accessories

25 & 28

#### PORTABLE LAMPS





No. 300

Lyhne Office and House Type

No. 300 Type Lamp is especially adapted for office use on roll or flat top desks. It is durable, efficient, inexpensive and perfectly plain. It cannot catch dust and has no fragile glass parts.

No. 500 Type Lamp is designed to fill the want for a handsomely finished artistic portable, which is

also a scientific lighting device for use in the home as a reading, sewing, piano or study lamp.

List	Mfi	rs. List	*W. E. List	List		Mfrs. List	*W. E. List
No.		Each		No.		Each	Each
300	Full brush brass	\$5.00	\$6.68	501	Statuary bronze	\$8.00	\$10.68
302	Full nickel	5.00	6.68	502	Verde antique	8.00	10.68
303	Full oxidized copper	5.00			Oxidized silver		13 34
	Flemish brass						20.04





Lyhne Bracket and Floor Type

No. 700 Type Lamp is a floor lamp which can be used for reading, sewing or piano. Also unexcelled for draftsmen, dentists, etc. Its optically perfect parabolic reflector and adjustable opaque shade always throw a powerful light just where you want it—never in your eyes. The base is 8½ inches in diameter

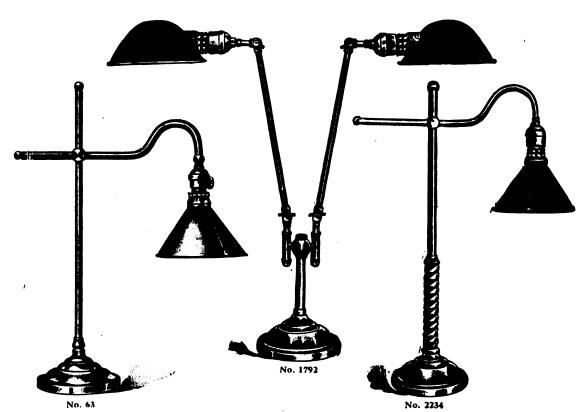
No. 600 Type Lamp has a telescoping swinging, double-jointed arm. It is adjustable and can be attached to the top or side of any desk or table or to the wall. It is specially adapted for draftsmen, dentists

and cugravers.	Mfrs. List	W. E. List
List No.	Each	*Each
700 Full brush brass, height 35 to 65 inches	\$8.00	\$10.68
702 Full nickel finish, height 35 to 65 inches	8.00	10.68
703 Full oxidized copper, height 35 to 65 inches	8.00	10.68
600 Brush brass finish; length closed, 14 inches; extended, 30 inches	6.25	8.34
602 Full nickel finish; length closed, 14 inches; extended, 30 inches	6.25	8.34
Full oxidized copper finish, length closed, 14 inches, extended, 30 inches.	6.25	8.34

Note: All of the above are equipped with socket, 6 feet of cord and Benjamin attachment plug.

\* Delivery F. O. B. Factory, Bridgeport, Conn. For warehouse deliveres write nearest house.

#### FARIES ADJUSTABLE PORTABLES



#### ADJUSTABLE PORTABLES

List No.		Height	Length Arm	Finish	Std. Pkg.	*List Price Each
63	One Arm Portable, extra heavy base		13 ins.	Brush brass	12	† <b>\$4</b> .00
<b>6</b> 3	One Arm Portable, extra heavy base		13 ins.	Ox. copper	12	† <b>4</b> . <b>40</b>
2233	Two Arm Portable, extra heavy base	24 ins.	13 ins.	Brush brass	12	‡5.€0
2233	Two Arm Portable, extra heavy base	24 ins.	13 ins.	Ox. copper	12	<b>‡</b> 6.16
No	. 2233 same as 63 portable, but furnished with	two arm	ıs.			
2234	One Arm Portable, extra heavy base	24 ins.	13 ins.	Brush brass	12	t4.80
2234	One Arm Portable, extra heavy base		13 ins.	Ox. copper	12	15.28
64	Two Arm Portable, extra neavy base		13 ins.	Brush brass	12	16.40
64	Two Arm Portable, extra heavy base		13 ins.	Ox.copper		+3
64	Two Arm Portable, extra heavy base		13 ins.	Ox. copper	12	<b>‡7.04</b>

If ring is desired on the above, add 15 cents to list.

†If above are desired wired add \$2.40 each.

III above are desired wired add \$3.20 each.

Note: The above prices do not include shades, lamps, shade holders, sockets or wiring.

#### No. 1792 ADJUSTABLE PORTABLE

Made with large tubing. Adjustable to any position. Extends 34 inches over all.

List No.		Height	Finish	Std. Pkg.	*List Price Each
1792 1792	Adjustable Portable		Brush brass Ox. copper	6	\$5.26 5.78

If wired with 9 feet silk cord, socket and plug, add \$3.00 to list. Prices do not include shades lamps, shade holders, sockets or wiring.

<sup>\*</sup>Delivery F. O. B. Factory, Decatur, Ill. For warehouse deliveries write nearest house

# Faries

#### **PORTABLES**

With Adjustable Green Glass Shades, White Opal Reflecting Surface Inside, Made of Cast and Sheet Brass

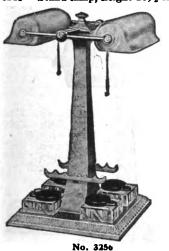




No. 3245

#### Desk or Table Portables

List		Size Lamp		Std.	†List Price
No.		Watts	Finish	Pkg.	Wired
3254	Stand lamp, height 18 in	. 25 or 60	Brush brass	6	<b>\$</b> 19.60
3254°	Stand lamp, height 18 in	. 25 or 60	Ox. copper	6	21.56
3245	Stand lamp, height 16½ in	. 25 or 60	Brush brass	6	<b>2</b> 0. <b>30</b>
3245	Stand lamp, height 16½ in				<b>22.34</b>





Desk or Table Portables

	•					
List		Size Lamp	Height		Std.	†List Price
No.		Watts	Ins.	Finish	Pkg.	Wired
3256	Portable for flat top desk	<b>25</b> or 60	161/2	Brush brass and black	6	\$28.00
3256	Portable for flat top desk	25 or 60	163%	Ox. copper	6	30.80
3247	Portable for flat top desk	25 or 60	151/2	Brush brass and black	6	28.70
3247	Portable for flat top desk	25 or 60	151/2	Ox. copper	6	31.58

Wiring includes 9 feet reinforced silk cord, pull chain, socket and plug.

Bases of portable are covered with felt and will not mar or scratch a desk.

The above are always shipped wired unless otherwise specified.

No. 3254 must be screwed to desk and is wired with fixture wire.

Delivery F. O. B. Factory, Decatur, Ill. For warehouse deliveries write nearest house.

#### Faries **PORTABLES**

With Adjustable Green Glass Shades, White Opal Reflecting Surface Inside, Made of Cast and Sheet Brass





No. 3244

#### Desk or Table Portables

List No.		Size Lamps Watts	Height		Std. Pkg.	*List Price Wired
3248	Portable	25 or 60	15 in.	Brush brass and black	6	\$11.90
	Portable				6	13.66
3244	Portable	25 or 60	16½ in.	Brush brass and black	6	14.00
3244	Portable	25 or 60	16½ in.	Ox. copper	6	15.40





No. 3255

Dock or Table Portables

	· ·	CSE OL	Iable	I OLIADIES		
List		Size Lamp			Std.	*List Price
No.		Watts	Height	Finish	Pkg.	Wired
3255	Portable	<b>25</b> or 60	16½ in.	Brush brass and black	6	\$21.00
3255	Portable	25 or 60	$16\frac{1}{2}$ in.	Ox. copper	6	21.70
3246	Portable	25 or 60	15½ in.	Brush brass and black	6	21.70
3246	Portable	<b>25</b> or 60	$15\frac{1}{2}$ in.	Ox. copper	6	<b>25</b> .40

Bases of portables are covered with felt and will not mar or scratch the desk.

Wiring includes 9 feet reinforced silk cord, pull chain, socket and plug.

The above are always shipped wired unless otherwise specified.

\*Delivery F. O. B. Factory, Decatur, Ill. For warehouse deliveries write nearest house.

#### **FARIES PORTABLES**

With adjustable green glass shades. White opal reflecting surface inside.





No. 3242

Desk Clamp and Wall Bracket

Door Olding did wan Discussion		
List	—List I	Price-
No. Finish	Std. Pkg.	
3242 Desk Clamp, square tubing, fits any desk up to 15 inches	6	<b>\$</b> 9.46
3242 Desk Clamp, square tubing, fits any desk up to 15 inches	6	10.40
Wired with 9 ft. silk cord, key socket, plug and green glass shade.		
3258† Wall Bracket, extends 7 inches	6	7.70
3258† Wall Bracket, extends 7 inches	6	8.48
Wired with fixture wire and pull chain socket and green glass shade.		





No. 3240

Adjustable Portable						
3068	Swing Portable Extends 12 in.	Brush brass	6	\$10.22		
3068	Swing Portable Extends 12 in.	Ox. copper	6	11,24		
3240	Swing Portable Extends 12 in.	Brush brass	6	10.16		
3240	Swing Portable Extends 12 in.	Ox. copper	6	11.18		
Wired with 9 ft. silk cord, key socket, plug and green glass shade.						



No.<u>∓</u>3243



No. 3249

Adjustable Portables			
3243 Swing Portable Extends 12 in.	Brush brass	6	\$10.50
3243 Swing Portable Extends 12 in.	Ox. copper	6	11.56
Wired with 9 ft. silk cord, key socket, plug and green glass shade.	• •		
3249 Swing Portable Extends 11 in.	Brush brass	6	12.60
3249 Swing Portable Extends 11 in.	Ox. copper	6	13.86
Wired with 9 ft. silk cord, pull chain socket, plug and green glass shade.			



No. 3250



No. 3251

	Piano and Desk Portable		
3250 3251	Fancy Cast PortableExtends 12 in.Brush brass and blackFancy Cast PortableExtends 12 in.Ox. copperFancy Cast PortableExtends 12 in.Brush brass and blackFancy Cast PortableExtends 12 in.Ox. copper	6	\$16.80 18.48 12.60 13.86

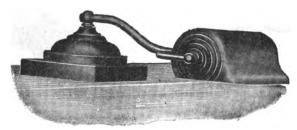
Wiring includes 9 feet re-inforced silk cord, key socket and plug and green glass shade. Note: The above are for 25 to 60 watt lamp.

Prices include Pull Sockets, on Nos. 3250 and 3251. Key Sockets on balance.

† Wired with fixture wire and pull chain socket.

Delivery F. O. B. Factory, Decatur, Ill. For warehouse deliveries write nearest house.

# FARIES ADJUSTABLE FIXTURES Desk Portables



No. 3067

#### No. 3067 DESK PORTABLE

Swinging portable with vertical adjustment and adjustable metal hood frosted inside, slate base. For roll-top desk or piano.

List No.		Finish	Std. Pkg.	*List Price Each
3067 3067	Swinging Portable, wiredSwinging Portable, wired	Brushed Brass	12 12	\$8.20 9.00



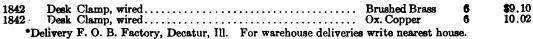


No. 1842

#### No. 885 DESK PORTABLE

Fits any desk up to 15 inches. Adjustable metal hood, frosted inside.

List         No.           885         Desk Clamp, wired	Finish Brushed Brass Ox. Copper	Std. Pkg. 6 6	*List Price Each \$6.50 7.16
No. 1842 DESK PORTABLE			
Fits any desk up to 15 inches. Glass hood, white inside, green out	side.		

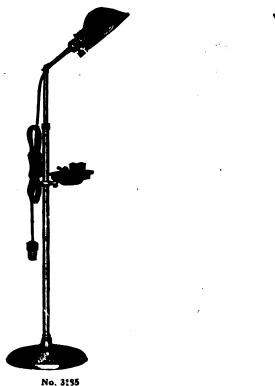


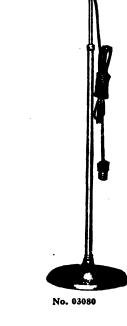


#### No. 97 DESK CLAMP

List			Std.	List	ach	
No.		Finish	Pkg.	Less than 6	6-12	12 and over
97	Deak Clamp	Brushed Brass	12	\$0.72	\$0.56	<b>\$0.50</b>
97	Desk Clamp		12	.80	.62	. 55
	*Delivery F O B Factory Decetur III	For warehouse de	livorios	write recreet	HATTOR	

#### FLOOR LAMPS





# Western Electric

#### Floor Portables

The two styles Western Electric Portables No. 3185 and No. 03080 shown are new lamps that will save your eyes and increase your comfort.

No. 3185 Portable is furnished with a removable glassash tray attachment which is clamped to the side of the tube and can be adjusted to any height. It has a heavy base nine inches in diameter and the bottom is covered with a felt pad so that it won't mar a polished floor. The stem is of heavy tubing and is adjustable from 2½ to 5 feet in height. The inside of reflector is aluminum finish and the outside is brush brass to match the other part of the portable.

No. 03080 Portable is exactly the same as the No. 3185 style except it is furnished without the glass ash tray attachment.

These portables can be used at back of chairs as a reading lamp, also as piano lamp and especially desirable as a bedroom or sickroom lamp.

List No.		Std. Pkg.	Stuatary Bronze or Verde Antique	*List Price Each Brush Brass
3185	Western Electric Floor Portable, with ash tray	12	<b>\$12.58</b>	\$10.40
03080	Western Electric Floor Portable, without ash tray	12	11.00	9.10

Price complete with socket, 6 feet silk cord and plug.

#### **FARIES WALL BRACKETS**



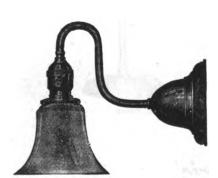




No. 3114

Electric Wall Brackets

	Electric Wall E	Brackets	<b></b> *	List Price Eac	h
List			Less	6 to	12 and
No.		Finish	Than 6	12	Over
173	Electric wall bracket, extends 5 in	Brush brass	<b>\$</b> 0.90	<b>\$</b> 0.63	<b>\$</b> 0.57
173	Electric wall bracket, extends 5 ins		1.00	.70	.63
3112	Electric wall bracket, extends 6 ins	Brush brass	1.60	1.12	1.00
3112	Electric wall bracket, extends 6 ins		1.76	1.23	.95
3114	Electric wall bracket, extends 6 ins		2.00	1.40	1.26
3114	Electric wall bracket, extends 6 ins	Ox. copper	2.20	1.54	1.52





No. 3113

No. 3111

	Electric Wa	ll Bra	ckets	*List Price Each		
List				Less	6 to	12 and
No.		Tubing	Finish	Than 6	12	Over
3113	Electric wall bracket, extends 10 ins	½ in.	Brush brass	<b>\$</b> 1.80	<b>\$</b> 1.26	<b>\$</b> 1.14
3113	Electric wall bracket, extends 10 ins	$\frac{1}{2}$ in.	Ox. copper	2.00	1.40	1.26
3111	Electric wall bracket, extends 10 ins	$\frac{1}{2}$ in.	Brush brass	1.80	1.26	1.14
3111	Electric wall bracket, extends 10 ins	15 in.	Ox. copper	2.00	1.40	1.26



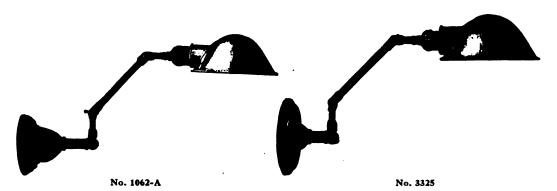
No. 180



No. 537

	Swing	g Wall	Brad	ckets	~*L	ist Price Ea	ch
List	_		Std.		Less	6 to	12 and
No.	•	Extends	Pkg.	Finish	Than 6	12	Over
180	One swing, heavy cast base	12 ins.	12	Brush brass	<b>\$2.50</b>	<b>\$</b> 2.00	<b>\$</b> 1.88
180	One swing, heavy cast base	12 ins.	12	Ox. copper	2.76	2.20	2.08
537	One swing, canopy $4\frac{1}{2}$ ins	15 ins.	12	Brush brass	3.00	2.40	2.26
537	One swing, canopy 4½ ins	15 ins.	12	Ox. copper	<b>3</b> .30	2.64	2.48

#### FARIES ADJUSTABLE BRACKETS



#### Adjustable Brackets

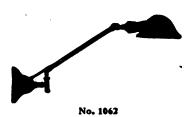
	•		•		*I	ist Price Ea	ch
List				Std.	Less	3 to	12 and
No.		Extends	Finish	Pkg.	Than 3	12	Over
13	Adjustable bracket	9 ins.	Brush brass	12	\$1.00	<b>\$</b> 0.80	<b>\$</b> 0.75
13	Adjustable bracket	9 ins.	Ox. copper	12	1.10	.88	.82
1062A	Adjustable bracket	15 ins.	Brush brass	12	3.00	2.40	2.26
1062A	Adjustable bracket	15 ins.	Ox. copper	12	3.30	2.64	2.48
3325	Adjustable bracket	$13^{1}$ ins.	Brush brass	12	3.00	2.40	2.26
3325	Adjustable bracket	$13\frac{1}{2}$ ins.	Ox. copper	12	3.30	2.64	2.48





#### Adjustable Brackets

					~T	ist Price Ea	cn
List				Std.	Less	3 to	12 and
No.		Extends	Finish	Pkg.	Than 3	12	Over
1770	One swing bracket, canopy 4½ ins.	12 ins.	Brush brass	12	\$3.00	\$2.40	\$2.26
1770	One swing bracket	12 ins.	Ox. copper	12	3.30	2.64	2.48
					Less Than 3	3 to	6 and Over
539	Square swing bracket	12 ins.	Brush brass	R	\$6.00	<b>\$</b> 4.80	\$4.50
539				6			
009	Square swing bracket	12 ins.	Ox. copper	6	6.60	<b>5</b> .28	4.96



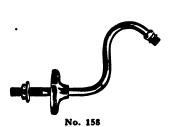


## Adjustable Brackets

					*I	ist Price Ea	ch
List No.		Extends	Finish	Std. Pkg.	Less Than 3	3 to 12	12 and Over
1062	Large tubing, crowfoot and 3 x 4½ in. canopy	24 ins.	Brush brass	12	\$3.00	\$2.40	\$2.26
1062 1052 1052	Large tubing, crowfoot and 3 x 4½ in. canopy	24 ins. 18 ins. 18 ins.	Ox. copper Brush brass Ox. copper	12 12 12	3.30 3.00 3.30	2.64 2.40 2.64	2.48 2.26 2.48

Note: Prices do not include shades, lamps, shade holders, sockets or wiring \*Delivery F. O. B. Factory, Decatur, Ill. For warehouse deliveries write nearest house

#### FARIES WALL BRACKETS AND TUBES

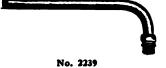




No. 1695

#### Switchboard Brackets

	•	•		*Lis	ch	
List No.		Finish	Std. Pkg.	Less than 6	6 to 12	12 and Over
158	Switchboard Bracket, extends 5 ins	Brush brass	12	<b>\$</b> 0.90	<b>\$</b> 0.63	\$0.57
158	Switchboard Bracket, extends 5 ins	Ox. copper	12	1.00	. 70	. 63
158	Switchboard Bracket, extends 5 ins	Pol. copper	- 12	1.20	. 84	. 75
1695	Switchboard Bracket, extends 6 ins., spread	• •				
	$5\frac{1}{2}$ ins	Brush brass	12	1.54	1.54	1.38
1695	Switchboard Bracket, extends 6 ins., spread					
	$5\frac{1}{2}$ ins	Ox. copper	12	1.70	1.70	1.52
_	<u> </u>					_

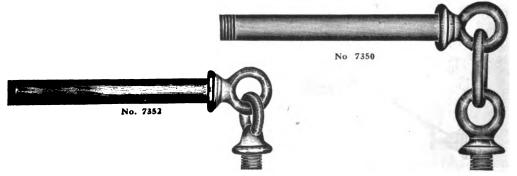






Electric Bracket Tubes

				*List Price Each					
				Brush Brass			Oxi	dized Copp	er
List			Std.	Less than	12 to	24 and	Less than	12 to	24 and
No.		Size	Pkg.	12	24	Over -	12	24	Over
2239	Electric Bracket Tubes	5 ins.	24	<b>\$</b> 0.36	<b>\$</b> 0.27	<b>\$</b> 0.25	<b>\$</b> 0.40	<b>\$</b> 0.30	<b>\$</b> 0.28
71	Electric Bracket Types	6 ins.	24	.34	. 25	. 23	. 37	. <b>28</b>	. 26
71	Electric Bracket Tubes	8 ins.	24	. 40	. 30	.28	. <b>44</b>	.32	.31
71	Electric Bracket Tubes 1	0 ins.	24	. 48	. 36	. 33	. 53	. 40	.33
80	Electric Bracket Tubes	6 ins.	24	. 34	. 25	.23	. 37	. <b>28</b>	.26
80	Electric Bracket Tubes	8 ins.	24	. 40	. 30	.28	. 44	.32	.31
80	Electric Bracket Tubes 1	0 ins.	24	.48	. 36	. 33	. 53	. 40	. 37



# Electric Bracket Tubes

					*List Price Each				
				Brush Brass			Oxidized Copper		
List		Size	Std.	Less than	12 to	24 and	Less than	12 to	24 and
No.	Length	Tube	Pkg.	12 •	24	Over	12	24	Over
7350	Fan /rm 71/2 ins.	1/4 iron	24	\$1.00	.75	.70	\$1.10	.82	.77
7352	Fan Arm $7\frac{1}{2}$ ins.	1/4 iron	24	.80	.60	. 56	.88	.66	.61

Norz: These tubes are always shipped in brush brass finish and the smallest size listed unless otherwise ordered.

\*Delivery F. O. B. Factory, Decatur, Ill. For warehouse deliveries write nearest house.

Lighting Fixtures and Accessories 87

# CONNECTORS, BUSHINGS AND BRASS NIPPLES









			t Price per l	100
List	Bushings	Less	50 to	100 and
No.	Dasimis	than 50	100	Over
844	1/4 x 1/8 iron	\$8.00	\$6.00	\$5.60
843	3⁄8 x 1⁄4 iron		9.00	8.40
842	$\sqrt[3]{8} \times \sqrt[1]{8}$ iron	13.00	9.76	9.10
1000	½ x 3/8 iron		13.50	12.60
		- CONTRACTOR		





			List I fice per	100
List	Brass Nozzles	<ul> <li>Less</li> </ul>	50 to	100 and
No.	_ : :-2 - : - 2 - : -	than 50	100	Over
139D	½ iron	<b>\$</b> 32.00	<b>\$24</b> .00	<b>\$</b> 22.40
124D	½ iron	32.00	24.00	22.40
124E	¼ iron		<b>24</b> .00	<b>22.40</b>









	Connectors and	Rushings	*Li	ist Price per 1	.00
List	Connectors and	Dusimigo	Less	50 to	100 and
No	•	Finish	than 50	100	Over
1756BB	45 angle, for clusters and ceiling fans		<b>\$36</b> .00	<b>\$</b> 27.00	<b>\$25</b> .20
1756OC	45 angle, for clusters and ceiling fans		39.60	<b>29</b> . <b>7</b> 0	<b>27.72</b>
2911A	1/8 iron to burner		40.00	30.00	<b>28</b> .00
161 A	1/8 iron to burner		6.00	4.50	4.20
143	1/8 x 1/8 iron	•	6.00	4.50	4.20











		*Li	st Price per	100
List No.	Nozzles and Nipples	Less than 50	50 to 100	100 and Over
123B	3/8 iron to burner	<b>\$40.00</b>	<b>\$</b> 30.00	<b>\$2</b> 8.00
2579A	End nozzle, tapped \( \frac{1}{8} \) and \( \frac{1}{4} \) iron, female, seats \( \frac{5}{8} \), \( \frac{3}{4} \), \( \frac{7}{8} \) and \( 1 \)			
	in, casing	48.00	36.00	33.60
798A	3/8 iron male, 3/8 iron female	40.00	30.00	28.00
799	3/8 x 3/8 iron	24.00	18.00	16.80
990B	¼ iron to burner	16.00	12.00	11.20
Dw	sehad and lacquared 5007 ortho			

Brushed and lacquered 50% extra.

Note: Goods on this page are always shipped unfinished unless otherwise specified, except No. 1756.

\*Delivery F. O. B. Factory, Decatur, Ill. For warehouse deliveries write nearest house.

#### FARIES CEILING AND WALL FIXTURES







No. 2912

#### Wall Plates

				Brush B	rass	Ox. Cop	pper
List			Size	Less than	10 and	Less than	10 and
No.		Tapped	Ins.	10	Over	10	Over
*2725	Female, deep wall plate or ceiling light.	1/8 in.	$3\frac{5}{8} \times 3\frac{3}{4}$	<b>\$</b> 0.70	<b>\$</b> 0.45	<b>\$</b> 0·77	\$0.54
<b>*7</b> 97	Male, deep wall plate or ceiling light	1/8 in.	$3\frac{5}{8} \times 3\frac{3}{4}$	.70	. 45	.77	.54
2912	Female, wall plate			.40	.28	-44	.31
*Fo	or electric pendant or bracket over gas out			ng joint.			



No. 2731 Female No. 2732 Male



No. 1684 Female No. 2913 Male



No. 95



**Bracket Plates** 

	-		‡List Price Each				
List		Size	Brush	Brass	Ox.C	оррег	
No.		Ins.	Less than 10	10 and Over	Less than 10-	10 and Over	
2731	Female, bracket plates, tapped 1/8 iron	$3\frac{1}{2} \times 1\frac{1}{2}$	<b>\$</b> 0.34	<b>\$</b> 0.23	<b>\$</b> 0.37	<b>\$</b> 0.27	
2732	Male, bracket plates, tapped 1/8 iron			. 23	.37	.27	
1684	Female, bracket plates, tapped 1/8 iron			. 22	.35	.25	
2913	Male, bracket plates, tapped 1/8 iron	$3\frac{1}{2} \times 1\frac{1}{2}$	.32	.22	.35	.25	
†95	Female, bracket plates, tapped 1/8 iron			.07	.11	.08	
45	Female, bracket plates, tapped 1/8 iron		.20	. 14	.21	.15	
†1½	inch male or female.			_			





No. 6-21/2 Inch Base



No. 7-For 1/4 Inch Pipe

#### **Ball Joint Wall Plates**

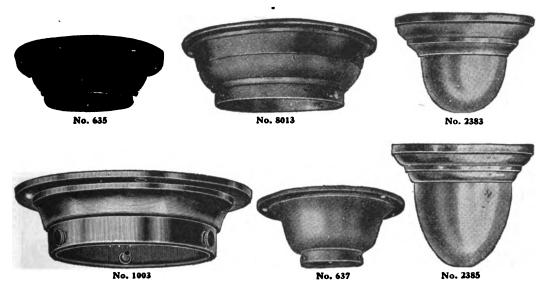
These wall plates are attachable to any flat surface and are for use with reflectors for directing the lamp's rays at different angles. They are very useful in window-lighting. Made of brass and bronze and carefully insulated.

No.	5-4½ Inch Base	*List Pric	
List No.	Description	Unfinished	Standard Finishes
No. 5	416 inch base, for attachment over conduit box	. \$2.00	\$2.50
6	2½ inch base, for attachment to woodwork or plaster	. 1.40	1.70
7	Base, for attachment to 3/8 inch pipe	. 1.80	2,10
	Note: Standard finishes are old brass, oxidized copper, polished brass and nickel	. For spec	ial finishes
add	10%.		

\* Delivery F. O. B. Factory, Worcester, Mass.

Delivery F. O. B. Factory, Decatur, Ill. For warehouse deliveries write nearest house.

# FARIES CEILING FIXTURES



		Ce	iling	and	Porch	Bands			
	No. 635 With Four Sci Used with Recept For 31/4 Inch	rew Ho tacle 6½ 1 Glass	4 x 2		Made	NO. 63 With Four Sc 61/4 x of Sheet Copper For 4 Inch	rew Hole 2 for Ou		Work
List		Less than	Price Ea	ich 50 and		101 4 11101		Price Ea	
No.	•	Less than 12	50	Over	List		Less than		50 and
635	Brush brass	\$0.60	\$0.42	\$0.36	No.		12	50	Over
635C	Black	.60	.42	.36	636E	Polished copper	\$0.78	\$0.55	\$0.47
635A	Unfinished	.50	.35	.30	636F 636D	Black	.78 .68	.55	.47 .41
	NO. 63 With Four Sc	rew Ho				NO. 10		•17	
	$6\frac{1}{4} \times 2$ . For 4 I	nch Gl	255		}	Used with Receptor 31/4 Inc		K 1 1/2	
636 636C 636A	Brush brass Black Unfinished	\$0.68 .68 .58	\$0:47 .47 .41	\$0.41 .41 .35	1003 1003C 1003A	Brush brass Black	<b>\$</b> 0.60	\$0.42 .42 .35	\$0.36 .36 .30
	NO. 801 Used with Recept For 6 Inch	tacle 93	4 x 3		100011	NO. 6 Used with Recep	37 otacle 6		.00
8013	Brush brass			\$1.20		For 21/4 Inc			
8013C 8013A		2.00 1.80	1.40 1.26	1.20 1.08	637 637A	Brush brass Unfinished		\$0.49 .42	\$0.42 .36
				h Four : 61/4	635D Screw H x 2 nch Gla				-
635E 635F	Polished copper Black	<b>\$</b> 0.70 .70	\$0.49 .49	\$0.42 .42	635D	Unfinished	<b>\$</b> 0.60	<b>\$</b> 0.42	<b>\$</b> 0.36
				Cam	nniaa				

Canopies

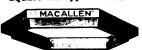
List	-		*List	Price Eacl	b
No.		Finish	Less than 12	12 to 50	50 and Over
2383	Canopy 4½ x 3 in., with ring	Brush brass	<b>\$</b> 0.56	\$0.39	<b>\$0.3</b> 6
2385	Canopy $4\frac{3}{4} \times 4\frac{1}{4}$ in., with ring			.49	.44
Non	E: Do not fail to specify size of slip ring desired.				
Bru	sh brass finish always shipped unless otherwise specifi	ed.		000	0

Delivery F. O. B. Factory, Decatur, Ill. For warehouse deliveries write nearest house.

# MACALLEN CANOPY INSULATORS



Square Canopy Insulator



Heragonal Canopy Insulator



Round Canopy Insulator INSULATING COMPOUND







Double Groove Canopy Insulator

,	deragonal Canopy Insulator	W1 C	in Metal King	Canopy insu	ator
,	The Maca	llen Squar	e Canopy	Insulators	
List	STANDARD BROWN COMPOU	ND List Price	List	WHITE COMPOUND	List Price
No.	Size 3 ins.	Each \$0.40	No. Sq-W-12	Size 3 ins.	Each \$0.50
Sq-B-12 Sq-B-13	3 ins. 3 1∕ ins	.44	Sq-W-13	3 ¼ ins.	.56
Sq-B-14	315 ins.	.48	Sq-W-14	31/2 ins.	.62
Sa-B-15	3 14 ins. 3 14 ins. 3 14 ins. 3 34 ins.	.52	Sq-W-15	3% ins.	.68
Sq-B-16	4 1ns.	.56	Sq-W-16 Sq-W-17	4 ins.	.74 .80
Sq-B-17 Sq-B-18	4 14 ins. 4 15 ins.	.60	Sq-W-18	4 ¼ ins. 4 ½ ins.	.86
Sq-B-19	434 ins.	.68	So-W-19	434 ins.	.92
Sq-B-20	5 ins.	.72	Sq-W-20	5 ins.	.98
Sq-B-21	514 ins.	.80	Sq-W-21	5½ ins. 5½ ins.	1.06
Sq-B-22 Sq-B-23	5 <sup>1</sup> 2 ins. 5 <sup>3</sup> 4 ins.	.96	Sq-W-22 Sq-W-23	5% ins.	1.14 1.22
Sq-B-24	6 ins.	1.04	Sq-W-24	6 ins.	1.30
-	Macallen	Hexagona		Insulators	
HX-B-16	4 ins.	\$0.56	HY-W-16	4 ins.	\$0.74
HX-B-17	4 1/4 ins.	.60	HX-W-17	4 ¼ ins.	.80
HX-B-17 HX-B-18	4 ¼ ins. 4 ½ ins.	.64	HX-W-16 HX-W-17 HX-W-18	4 ½ ins.	.86
HX-B-19	434 ins.	.68	HX-W-19	4 3/4 ins.	.92
HX-B-20	5 ins.	.72 .80	HX-W-20 HX-W-21	5 ins.	.98 1.06
HY-B-21	5½ ins.	.88	HX-W-22	5½ ins. 5½ ins.	1.14
HX-B-21 HX-B-22 HX-B-23	5¼ ins. 5½ ins. 5¾ ins.	96	HX-W-23	534 ins.	1.22
HX-B-24	6 ins.	1.04	HX-W-24	6 ins.	1.30
	Canopy	<sup>,</sup> Insulator	with Me	tal Ring	
2150	4 ins.	\$0.32	1 2250	4 ins.	\$0.48
2151	416 ins.	.33	2251	4 1/8 ins.	.49 .50
2152	4 ¼ 1ns.	.34 .35	2252 2253	4 ¼ ins.	.50 .51
2153 2154	416 ins.	.36	2254	4 % ins. 4 ½ ins.	. 52
2155	45% ins.	.37	2255	4 % ins.	.54 .56
2156	4 ½ ins. 4 ½ ins. 4 ½ ins. 4 ½ ins. 4 % ins. 4 % ins.	.38	1 2256	4% ins.	. 56
2157	4 /8 ins.	.39	2257	4 ½ ins.	.58
2158 2159	5 ins. 5½ ins.	.40 .42	2258 2259	5 ins. 5⅓ ins.	.60 .62
2160	51/ ine	.44	2260	5¼ ine	.64
2161	5 % ins. 5 ½ ins. 5 ½ ins. 5 % ins.	.46	2261	53% ins. 5½ ins. 5% ins.	.66
2162	5½ ins.	.48	2262	514 ins.	.68
2163	5% ins. 5% ins.	.50 .52	2263 2264	5% ins. 5% ins.	.70 .72
2164 2165	5 ½ ins.	.54	2265	578 ins.	:74
2166	6 ins.	.56	2266	6 ins.	.76
	Old Style or	Double Gr	oove Cano	opy Insulators	
1291	4 ins.	\$0.32	1301	4 ins.	\$0.50
1292	4 1/2 ins.	.36	1302	41/2 ins.	. 55
1293	5 ina	.40	1303	5 ins.	.60
1294 1295	51/4 ins. 6 ins.	.50 .60	1304   1305	5½ ins. 6 ins.	.70 .80
1295	6½ ins.	.70	1306	6½ ins.	.90
1297	7 ins.	.80	1307	7 ins.	1.08
1298	71/2 ins.	.90	1308	7½ ins.	1.26
1299	8 ins.	1.04	1309	8 ins.	1.14
1247 1248	8½ ins. 9 ins.	1.18 1.32	1316 1317	8½ ins. 9 ins.	1.62 1.80
1290	10 ins.	1.32	1318	10 ins.	2,20
	The Mac	allen Roun	d Canony	Insulator	
B- 9	21/4 and 21/4 ins.	\$0.20	W- 9		<b>\$0.3</b> 0
B-10	2½ and 2½ ins. 2½ and 2½ ins.	.21	I W-10	21/2 and 21/2 ins. 23/4 and 21/2 ins.	.32
B-11	25% and 23% ins.	.22	W-11	2% and 2% ins.	.34
B-12	2% and 2% ins. 2% and 3 ins. 3% and 3% ins.	.23	W-12 W-13	21/a and 3 ins.	.36
B-13 B-14	31% and 31% ins. 31% and 31% ins.	.24 .25	W-13 W-14	$3\frac{1}{16}$ and $3\frac{1}{16}$ ins. $3\frac{1}{16}$ and $3\frac{1}{16}$ ins.	.38
B-15	35% and 334 ins.		W-15	35% and 3 % ins.	.42
B-16	3 % and 4 ins.	.26 .28	W-16	3 % and 4 ins.	.44
B-17	4 1/4 and 4 1/4 ins.	.30	W-17	41% and 41% ins.	.46
B-18	43% and 412 ins.	.32 .34	W-18 W-19	A& and Alaine	.48
B-19 B-20	4 % and 4 % ins. 4 % and 5 ins.	.36	W-20	$4\frac{5}{2}$ and $4\frac{3}{4}$ ins. $4\frac{7}{2}$ and $5$ ins.	.52 56
B-21	5½ and 5¼ ins.	.40	W-21	51% and 51% ins.	.56 .60 .64
B-22	5% and $5%$ ins.	.44	W-22	o% and o% ins.	. 64
B-23	5% and 5% ins.	.48	W-23		.68
B-24 B-25	5% and 6 ins.	.52 .56	W-24 W-25	5% and 61% ins.	.68 .72 .76
B-25 B-26	614 and 614 ins. 614 and 614 ins.	.60	₩-26	6% and 6% ins.	.80
B-27	6% and 6% ins.	.66	W-27	65% and 6% ins.	.88
B-28	6% and 7 ins.	.72	W-28	5% and 5 ins. 5% and 6 ins. 6% and 6% ins. 6% and 6% ins. 6% and 6% ins. 6% and 6% ins.	.96

# Western Electric

# MACALLEN INSULATING JOINTS NEW ARMORED TYPE Combination Joints

The Macallen Company have produced a new form of insulating joint which is the result of much research and experience. They have studied the weak points of every insulating joint ever made, and are satisfied that this new joint overcomes every objection from a mechanical or electrical point of view.

This joint is the most compact, has the greatest mechanical strength and the highest insulating qualities

of any insulating joint ever produced.

The armored portion of this joint, being octagonal in shape, makes it extremely easy to install. The metal portions are all steel, the octagonal portion being made of seamless drawn steel tubing, and the nipples turned from steel rod.

These joints are regularly inspected and labeled under the supervision of the Underwriters' Laboratories, Inc., under the direction of the National Board of Fire Underwriters.



No. 7501

misee.



No. 7521



No. 7601



No. 7621



No. 7631

For Combination Fixtures	With Male and Female Thread	With Iron	Hickey	With Brass	Hickey Fo	r Brass Tubing
		FOR COMB	INATION	FIXTURE	S	
List No.	Size	List Price		,	Size	List Price
7501	3/8 x 1/8	\$0.72	7509	<b></b>	3/4 x 1/2	<b>\$2.50</b>
7502	$\frac{3}{8} \times \frac{1}{4}$	.72	7510		¾ x ¾	2.50
7503	3/8 x 3/8	.72	7511		$1 \times \frac{1}{2}$	3.50
7504	1/2 x 1/8	1.00	7512		1 x 3/4	3.50
7505	$\frac{1}{2} \times \frac{1}{4}$	1.00	7513	• • • • • • •	1 x 1	3.50
7506	1/2 x 3/8	1.00 1.00	7514		11/4 x 11/4	7.50 9.60
7508	1/2 x 1/2 3/4 x 3/8	2.50	7516	• • • • • •	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	9,00 14,40
7000	COMBINAT			AND FEM		14,40
7521	3/8 F x 1/8 M	\$0.72 I			34 F x 36 M	\$2.90
7522	% F x 1/4 M	.72	7520		34 F x 1/2 M	<b>2</b> .90
7523	8% F x 8% M	.72			% F x 3/4 M	2.90
7524	3% F x 3% M 1/2 F x 1/8 M	1.00			1 F x ½ M	4.00
7525	1/2 F x 1/2 M	1.00	7532		· 1 F x 3/4 M	4.00
7526	1/2 F x 3/8 M	1.00				4.00
<b>7527</b>	⅓ F x ⅓ M	1.00	1			
With male end s	ame size as or lar	ger than femal	e end, same	e price.		
	ELECTR	OLIER OR	SEPARAB	LE JOINT	S	
7601	3/8 x 1/8	\$0.80	7607			\$1.15
7602	3% x 1/4	.80	7608		1/2 x 1/2 3/4 x 3/8	3.20
7603	3% x 3%	.80	7609		34 x 1/2 34 x 34	3.20
7604	12 x 18	1.10	7610		34 x 34	3.20
7605	1/2 x 1/4	1.10	7611		1 x 3/4	4.50
7606	½ x 3/8	1.10	7612		1 x 1	4.50
	ELECTR	OLIER OR			S	
=	• • • •	With Bras				
7621	3/8 x 1/8 3/8 x 1/4	\$0.95			½ x ¼	\$1.35
7622	% X 1/4	.95		· · · · · · · ·	½ x 3/8 ½ x ½	1.35
7623	3/8 x 3/8 1/2 x 1/8	$\begin{array}{c} .95 \\ 1.35 \end{array}$	1021	• • • • • • •	12 x 1/2	1.45
7024		• • • •			٠ ١	
4. <u>1</u>		OLIER OR		_		
7001		lickeys Tapp				<b>e</b> 1 10
7631		88 (0.80	7635		½ iron x ¾ bras	\$1.10 \$8 1.10
7632	3/8 iron x 1/2 bra 3/8 iron x 1/2 bra	88 .00   80	7637		1/2 iron x 1/6 bras	ss 1.10
7634		88 80 B	7638		$\frac{1}{2}$ iron x $\frac{7}{16}$ brau $\frac{1}{2}$ iron x $\frac{1}{2}$ brau $\frac{1}{2}$ iron x $\frac{5}{8}$ brau $\frac{1}{2}$ iron x $\frac{5}{8}$ brau	ss 1.10
Brees tubing sig	on miven above	om objectes one	nguromenta	and are t	anned to Magal	lon's standard

\*Delivery F. O. B. Factory, Boston, Mass. For warehouse deliveries write nearest house.

Brass tubing sizes given above are outside measurements, and are tapped to Macallen's standard

# Western Electric

# MACALLEN INSULATING JOINTS

# **NEW ARMORED TYPE** Blank Joints







Male and Female Thread Plain Joint

ELECTROLIER OR SEPARABLE JOINTS							
With Malleable Iron	Male Thread	Hickeys	With Brass Ma	le Thread Hi	ckeys		
List No.	Size	*List Price	List No.	Size	*List Price		
7681	3/8 x 1/8	\$0.80	7691	3/8 x 1/8	<b>\$0</b> .95		
7682	3/8 x 1/4	.80	7692	3/8 x 1/4	.95		
7683	3/8 x 3/8 3/2 x 3/8	.80	7693	3/8 x 3/8	1.05		
7684	12 × 18	1.10	7694	½ x ½	1.25		
7685	1/2 x 1/4 1/2 x 3/8	1.10 1.10	7695	1/2 x 1/4 1/2 x 3/8	$1.25 \\ 1.25$		
7000	72 × 78	1.10	7696	72 * 78	1.20		
	Insula	ting Joint	used for Above		4		
List No.		*List Price	List No.	Size	*List Price		
7703	3/8 x 3/8	\$0.72	7706	½ x 3/8	<b>\$1.00</b>		
For Nos. 7681	-2-3-7691-2-3		For Nos. 768	34-5-6-769 <b>4</b> -5-	6		
Malleable Iron H	lickeys For Al	bove	Brass Hick	eys For Above	•		
List No.	Size	*List Price	List No.	Size	*List Price		
1535 1	6 F x 3/6 M	\$0.10	1534	1/6 F x 3/6 M	\$0.40		
1535	4 F x 3/8 M	.10	1508	14 F x 38 M	.40		
1539	<sub>8</sub> F x <sup>3</sup> / <sub>8</sub> M	.15	1510	3/8 F x 3/8 M	.50		
The above hickeys are all insulating joints listed	e tapp <mark>ed o</mark> n mal above.	le end 3/8 inc	ch standard iron pipe size	, and are interc	hangeable on		
BLAN	K JOINTS F	OR EXTE	RNALLY WIRED FIX	TURES			
List No.	Size	*List Price	List No.	Size	*List Price		
7701	8/4 × 1/4	\$0.72	7700	3/ v 1/	\$2.50		

List No. 7701		*List Price   \$0.72   .72   .72   1.00   1.00	List No. 7709	34 x 34 1 x 1/2 1 x 34	*List Price \$2.50 2.50 3.50 3.50 3.50
7706. 7707. 7708.	34 x 3/8	1.00 1.00 2.50	7714	$1\frac{1}{4} \times 1\frac{1}{4}$ $1\frac{1}{2} \times 1\frac{1}{2}$	7.50 9.60 14.40
List No.	Size	*List Price		Size	*List Price
7721	3/8 F x 1/8 M 3/6 F x 1/4 M	\$0.72 .72 .72	7728 7729	34 F x 38 M 34 F x ½ M	\$2.90 2.90 2.90

7724	6 F x 1/8 M 2 F x 1/4 M 2 F x 3/8 M 2 F x 1/2 M	1.00	7731 7732 7733	1 Fx 3/4 M	4.00 4.00 4.00
List No. 7734	Size	*List Price	List No.	Size	*List Price \$1,00

7734. 36 M x 16 F 7735. 36 M x 16 F 423601. 36 M x 16 F 1.00 Delivery F. O. B. Factory, Boston, Mass. For warehouse deliveries write hearest house.

# Western Electric MACALLEN INSULATING JOINTS







Stud with Hickey

lnsu.	lated	<b>Fix</b>	ture	Stud	8
-------	-------	------------	------	------	---

List No.	Size	Malleable Iron	*List Price Each
1335	1/8		\$0.75
1339	1/4	• • • • • • • • • • • • • • • • • • • •	
1340		• • • • • • • • • • • • • • • • • • • •	
Furnished	d to order in	composition brass.	

Insulated Fixture Studs With Hickeys

List No.	Size	Malleable Iron	*List Price Each
1329	1/8		<b>\$0</b> .90
1330	1/4		
1334	3/8		

These studs are secured to the box with four screws and are designed to fit the "Bossert" and other

standard outlet boxes. Hickeys

			Mallea	ble Iron
Size	List Price Each	Il List No.	Size	List Pric

List No.	Size List	Price Each	List No.	Size Lis	st Price Each	List No.	Size	List Price Each
1450	⅓ x ⅓	\$0.10	1455	3/8 x 3/8	<b>\$0</b> .15	1597	3∕4 x	<b>\$0.40</b>
1451	1/4 x 1/8	.10	1461	½ x ½	.18	1464	3∕4 x	1/2 .42
1452	1/4 x 1/4	.10	1462	½ x ¼	.18	1457	3∕4 x	.50
1453	38 x 1/8	.13	1463	½ x 3/8 °	.18	1465	1 x	.55
1454	3/8 x 3/4	13	1456	1/2 x 1/2	.20	1458	1 x 1	.60

The above hickeys will not fit insulating joints the nipples of which are tapped with special straight threads.

inreads.



Joints for Gas Mains and Interior Conduits

Sectional View of Joint for Conduits

# Insulating Joints for Gas Service Mains and Interior Conduits

They are insulated on the interior surface to prevent moisture lodging around the mica insulation where they are used on gas service mains.

	Composition Bra	188	Maileable Iron				
List	-	*List Price	List		*List Price		
No.	Size	Each.	No.	Size	Each		
1624	3/4 x 3/4	\$3.80	1634	¾ x ¾	\$2.80		
1625	1 x1	6.40	1635	1 x 1	3.90		
1626	11/4 x 11/4	8.80	1636	1½ x 1½	8.00		
1627	11/2 x 11/2	14.80	1637	1½ x 1½	10.00		
1628	2 x 2	24,40	1638	2 x 2	14.80		
1629	$2\frac{1}{2} \times 2\frac{1}{2}$	48.80	1639	$2\frac{1}{2} \times 2\frac{1}{2}$	32.80		
1630	3 x 3	72.80	1640	3 x 3	48.80		

Blank Joints for Insulating Metal Rods

Tapped Machine Sizes
These joints should not be used where the voltage exceeds 500.

Composition Brass					Malleable Iron				
List	•		*List Price	List			*List Price		
No.	Size	Thread	Each	No.	Size	Thread	Each		
1643	½ x ½	13 U.S.S.	\$1.40	1653	½ x ½	13 U.S.S.	\$1.00		
1644	5/8 x 5/8	11 U.S.S.	1.90	1654	5⁄8 x 5∕8	11 U.S.S.	1.20		
1645	34 x 34	10 U.S.S.	2.80	1655	¾ x ¾	10 U.S.S.	1.60		
1646	% x ⅓	9 U. S. S.	3.20	1656	₹ x 1/8	9 U. S. S.	2.20		
1647	í v í	8 U. S. S.	4.80	1657	ĺxí	8 U. S. S.	3.00		

Larger or smaller sizes or tapped to 16th sizes to order. Whitworth and other special threads to order.

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# Western Electric

# MACALLEN INSULATING JOINTS

Malleable Iron









Insulated Hook Iron Crowfoot

Insulated Hooks and Eyes for Suspending Electric Fans, Etc. Insulated Hooks | Insulated Eyes

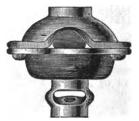
List No. 1391 1392 1393	Size % in	1.30	1395 1396	Size 3/4 in	1.30
	Ir	sulated	Crowf	oot	
1401	1/8 in	\$0.90	1404	1/2 in	\$1.20 2.50

.90 ||



1403





Double Separable Electrolier Joint

Separable Electrolier Joint

Combined Electrolier
Joint with Hickey

Double Separable Electrolier Joints

These joints are designed to use with straight electrolier Tripod Joints

For conduits, with passage for wires through insulation

tric h	ctures in p	naces where	nxtures cant	or be li	sulation	• ′		
turned				- 11	List		I	ist Price
List			Li	st Price	No.	Size		Each
No.	Size			Each	1351	3/8 x 1/8 in.		\$1.20
1341	3/8 x 1/8 in			\$1.30	1352	3/8 x 1/4 in.		1.20
1342	$\frac{3}{8}$ x $\frac{1}{4}$ in			1.30	1353	3/8 x 3/8 in.		1.30
1343	3/8 x 3/8 in			1.30	1354	$\frac{1}{2} \times \frac{1}{8} \text{ in }$ .		1.30
1344	$\frac{1}{2} \times \frac{1}{8} \text{ in}$			1.40	1355	$\frac{1}{2}$ x $\frac{1}{4}$ in.		1.30
1345	$\frac{1}{2}$ x $\frac{1}{4}$ in			1.40	1356	$\frac{1}{2} \times \frac{3}{8} \text{ in}$ .	,	1.40
1346	$\frac{1}{2} \times \frac{3}{8} \text{ in}$	<b></b>		1.40	1357	$\frac{1}{2}$ x $\frac{1}{2}$ in.		1.30
1347	$\frac{1}{2}$ x $\frac{1}{2}$ in			1.60 Ⅱ	1359	$\frac{3}{4} \times \frac{1}{2} \text{ in }.$		1.80

Combined Electrolier Tripod and Hickey Separable Joints

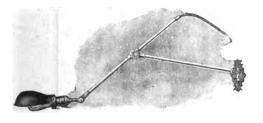
	With double outlets for wires and no 1	passage	through	insulation.	
136	1 3/8 x 1/8 in	<b>\$1</b> .30	1365	½ x ¼ in	\$1.40
136	2 3/8 x 1/4 in	1.30	1366	$\frac{1}{2}$ x $\frac{3}{8}$ in	1.40
136	3 3/8 x 3/8 in	1.30	1367	$\frac{1}{2} \times \frac{1}{2} \text{ in } \dots$	1.60
136	4 1/6 x 1/6 in	1 40	li .		

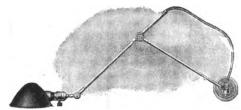
Iron Crowfoot				11	Iron	Tripod		l.	Iron	Dupods	
List			List Price	List			List Price	List		-	List Price
No.	Tapped	Diam.	per 100	No.	Tapped	Diam.	per 100	No.	Tapped	Diam.	per 100
591	1/8	$2\frac{1}{4}$	<b>\$</b> 5.60	586	1/8	$2\frac{3}{4}$	<b>\$</b> 6.10	597	1/8		<b>\$7</b> .50
592	1/4	$2\frac{1}{4}$	5.60	587	1/4	$2\frac{3}{4}$ .	6.10	598	1/4		7.50
593	3/8	21/4	5.60	588	3/8	$2\frac{3}{4}$	6.10	599	1/2	Teres	7.50

Delivery F. O. B. Factory, Boston, Mass. For warehouse deliveries write nearest house.

\*List

# WHITE ADJUSTABLE FIXTURES · Wall Brackets





Style 1F

Style 3F

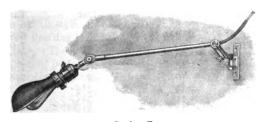
#### STYLE 1F BRACKET

This bracket as illustrated is made for attaching to wall where wiring is open. Total extension 36 inches.

List	,	Price
No.	Description	Each
1F ·	Bracket as shown, less shade socket and wiring. Standard finishes	<b>\$</b> 9.00
1 <b>F</b>	Fitted with base (F.O.) for 4 inch outlet box	11.50
1 <b>F</b>	Fitted with base (F.P.) for attaching to 3/8 inch pipe	9.50

#### STYLE 3F BRACKET

This bracket is made for attaching to woodwork or plastering where wiring is concealed. Base plate is 4½ inches in diameter, with insulated bushing for cord. Total extension 36 inches.



Style 7F



Style 8F

#### STYLE 7F BRACKET-

This bracket has adjustable joints at wall and lamp, but does not telescope. Extension 16 inches.

•	·	*List
List	•	Price
No.	Description	Each
7 <b>F</b>	Bracket as shown, less shade, socket and wiring. Standard finishes	<b>\$</b> 6.50
7 <b>F</b>	Fitted with base (F.O.) for 4 inch outlet box	9.00
7 <b>F</b>	Fitted with base (F.P.) for attaching to 3/8 inch pipe	7.00

#### STYLE 8F BRACKET

This bracket is telescoping and universally adjustable. Length: Closed 15 inches; fully extended 24 inches.

		\$7.50
8F	Fitted with base (F.O.) for 4 inch outlet box	10.00
8F	Fitted with base (F.P.) for attaching to 3% inch pipe	8.00

#### STYLE 9F BRACKET

Same as style 8F, but with longer extension. Length: Closed 20 inches; fully extended 34 inches.

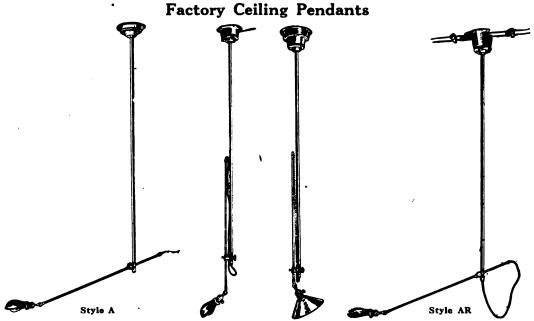
9 <b>F</b>	Bracket, less shade, socket and wiring. Standard finishes	\$8.50
9F	Fitted with base (F.O.) for 4 inch outlet box	11.00
9F	Fitted with base (F.P.) for attaching to % inch pipe	9.00

Note: Standard finishes on the above fixtures are old brass, oxidized copper, polished brass or nickel. For special finishes add 10%.

\*Delivery F. O. B. Factory, Worcester, Mass. For warehouse deliveries write nearest house.

# Western Electric

# WHITE ADJUSTABLE FIXTURES



Style AW Style AC STYLE A PENDANT

Universally adjustable at base, cone-joint and wrist-joint. Wiring through lamp arm only. Prices are for black finish and do not include shade, socket or wiring.

	Leı	ngth	*List l	ı	Leı	ngth	*List
List	Main Arm	Lamp Arm	Price	List	Main Arm	Lamp Arm	Price
No.	Feet	Feet	Each	No.	Feet	Feet	Each
420105	3	<b>2</b>	\$4.00	420115	8	3	<b>\$</b> 6.60
420106	$3\frac{1}{2}$	2	4.20	420116	81/2	3	6.80
420107	4	$2\frac{1}{2}$	4.50	420117	9	3	7.00
420108	41/2	$2\frac{1}{2}$	4.70	420118	91/2	3	7.20
420109	5	$2\frac{1}{2}$	4.90	420119	10	3	7.40
420110	$5\frac{1}{2}$	$2\overline{1/2}$	5.10	420120	101/2	3	7.60
420111	6	$2\frac{1}{2}$	5.30	420121	11	31/2 `	8.20
420112	$6\frac{1}{2}$	$2\frac{1}{2}$	5.50	420122	111/2	31/2	8.40
420113	7	$2\frac{1}{2}$	5.70	420123	12	31/2	8.60
420114	71/2	21/2	5.90				

STYLE AW PENDANT

	Similar to	o Type A	, but adapted for	wiring throug	h both maiı	n arm and lamp arm.	Black f	ìnish.
4201	24	3	2	<b>\$</b> 4.90	420134	8	3	<b>\$</b> 7.60
4201	25	31/2	<b>2</b>	5.10	420135	81/2	3	7.80
4201	26	4	$2\frac{1}{2}$	5.40	420136	9	3	8.00
4201	27	41/2	21/2	5.60	420137	$9\frac{1}{2}$	3	8.20
4201	28	5	$2\frac{1}{2}$	5.80	420138	10	3	8.40
4201	29	51/2	$2\frac{1}{2}$	6.00	420139	101/2	3	8.60
4201	30 ′	6	21/2	6.20	420140	11	3	8.80
4201	31	61/2	$2\frac{1}{2}$	6.40	420141	111/2	3	9.00
4201	32	7	21/2	6.60	420142	12	3	9.20
4201	.33	71/2	$2\frac{1}{2}$	6.80 ll		_		

STYLE AC PENDANT

	Similar to Type AW,	but adapted for	attachment over outlet	box in conduit in	stallations.	Black finish.
4201	43 3	2	\$5.50    420148	$5\frac{1}{2}$	21/2	<b>\$</b> 6.60
4201	44 3½	2	5.70   420149	6	$2\frac{1}{2}$	6.80
4201	45 4	$2\frac{1}{2}$	6.00    420150	$6\frac{1}{2}$	$\frac{21/2}{21/2}$	7.00
4201	46 4½	21/2	6.20   420151	7	21/2	7.20
4201	47 5	$2\frac{1}{2}$	6.40   420152	71/2	21/2	7.40

STYLE AR PENDANT
Similar to Type AW, but adapted for use with cleat and molding wiring. Black finish

Cimilar	W IJPC IIII, N	a uaupica ioi	and with diems and more	····· . · · · · · · · · · · · · · · · ·	DIOCE HIMIL.	
420153	3	${f 2}$	<b>\$</b> 4.80    420158	$5\frac{1}{2}$	21/2	<b>\$</b> 5.90
420154	31/2	2	5.00   420159	6	21/2	6.10
420155	4	$2\frac{1}{2}$	5.30    <b>4</b> 20160	$6\frac{1}{2}$	21/2	6.30
<b>420156</b>	41/2	21/2	5.50    420161	7	21/2 21/2	6.50
420157	5	$2\frac{1}{2}$	5.70    420162	71/2	21/2	6.70

Note: Black finish sent unless otherwise ordered, on all factory fixtures, but they can be furnished in any finish desired for use in hospitals, offices, etc. Prices in finishes other than black on request.

\*Delivery F. O. B. Factory, Worcester, Mass.

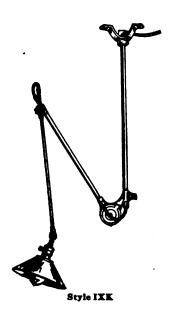
Lighting Fixtures and Accessories

\*\*Real Pixtures\*\*

\*\*Real P

## WHITE ADJUSTABLE FIXTURES

# Factory Ceiling Pendants





## STYLE IXK PENDANT

This style of pendant has full range of movement in every direction, and is especially designed for use over drafting tables and in stock and packing rooms where the principal adjustments are on a vertical plane. The middle arm gives the fixture range over a great area. Cord runs through all three arms insuring perfect protection. The disk joint is fitted with a powerful compensating spring which nicely balances the whole. Prices are for black finish only, and do not include shades, sockets or wiring.

Length				Length——							
	Height of	Main	Middle	Lamp	*List		Height of	Main	Middle	Lamp	*List
List	Room	Arm	Arm	Arm	Price	List	Room	Arm	Arm	Arm	Price
No.	Feet	Feet	Feet	Feet	Each	No.	Feet	Feet	Feet	Feet	Each
420042	8	1	11/2	2	\$6.00	420049	111/2	41/2	21/2	3	\$8.00
420043	81/2	11/2	11/2	2	6.20	420050	12	5	3 -	31/2	9.20
420044	9	2	2	$2\frac{1}{2}$	6.70	420051	121/2	51/2	3	$3\frac{1}{2}$	9.40
420045	91⁄2	21/2	2	$\frac{2\frac{1}{2}}{2\frac{1}{2}}$	6.90	420052	13	6	3	31/2	9.60
420046	10	3	2	21/2	7.10	420053	131/2	61/2	3	31/2	9.80
420047	101/2	31/2	21/2	3	7.60	420054	14	7	3	31/2	10.00
420048	11	4	21/2	3	7.80	1				_	

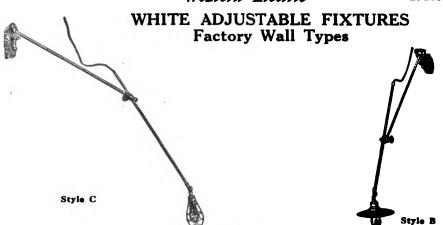
#### STYLE IXKK PENDANT

This pendant is similar to Style 1XK, except that it has two lights.

			-Length-		ł	1			-Length-		
List No.	Height of Room Feet	Main Arm Feet	Middle Arm Feet	Lamp Arm Feet	*List Price Each	List No.	Height of Room Feet	Main Arm Feet	Middle Arm Feet	Lamp Arm Feet	*List Price Each
420055 420056 420057 420058 420059 420060 420061	8 8½ 9 9½ 10 10½	1 1½ 2 2½ 3 3½	1½ 1½ 2 2 2 2 2½ 2½	2 2 2½ 2½ 2½ 3 3	\$12.20 12.40 13.00 13.20 13.40 14.00 14.20	420062 420063 420064 420065 420066 420067	11½ 12 12½ 13 13½ 14	4½ 5 5½ 6 6½ 7	2½ 3 3 3 3 3	3 3 3 3 3 3 3 3 3 3 3 3 3 3	\$14.40 16.00 16.30 16.60 16.70 19.20

Note: Black finish sent unless otherwise ordered, on all factory fixtures, but they can be furnished in any finish desired for use in hospitals, offices, etc. Prices in finishes other than black on request.

\*Delivery F. O. B. Factory, Worcester, Mass. For warehouse deliveries write nearest house.



STYLE C WALL FIXTURE
This wall fixture is made for extensions up to 8 feet. The ball and socket joint at the base is seated in a cone bearing so that the fixture can be swung through more than 180 degrees, as well as up and down, thus securing wide range. Prices cover black finish only, and do not include shade, socket or wiring.

	Lei	ngth	*List		*List		
List	Main Arm	Lamp Arm	Price	List	Main Arm	Lamp Arm	Price
No.	Feet	Feet	Each	No.	Feet	Feet	Each
420068	21/2	21/2	\$4.50	420071	4	3	\$5.20
420069	3	3	4.80	420072	41/2	3	5.40
420070	31⁄2	3	5.00	420073	5 -	3	5.60

STYLE B WALL FIXTURE

This fixture is a light form for use over benches, desks, etc. It has a ball-and-socket base-joint, cone, and wrist-joint, giving considerable range of adjustability. Prices cover black finish only, and do not include shade, socket or wiring.

420074	11/2	11/2	\$3.40    420077	3	$\frac{2\frac{1}{2}}{2\frac{1}{2}}$	\$4.20
420075	2	11/2	3.60   420078	31/2	21/2	4.40
420076	21/2	2	3.90   420079	4	21/2	4.60



STYLE G WALL FIXTURE

This fixture is made for extensions up to 14 feet. It is designed to secure extra strength of base joint and has a very wide range of adjustment. Both upper and lower arms are insulated through their entire length, thus affording protection to the cord.

	Le	ngth	*List	I	Le	ngth	*List
List	Main Arm	Lamp Arm	Price	List	Main Arm	Lamp Arm	Price
No.	Feet	Feet	Each	No.	Feet	Feet	Each
420080	11/2	11/2	\$5.00	420088	5	3	<b>\$</b> 6.80
420081	2	<b>2</b>	5.30	420089	51/2	3	7.00
420082	21/2	2	5.50	420090	6	3	7.20
420083	$2\frac{1}{2}$	21/2	5.70	420091	61/2	3	7.40
420084	3	3	6.00	420092	7	3	8.00
420085	31/2	3	6.20	420093	71/2	3	8.20
420086	4	3	6.40	420094	8	3	8.40
420087	434	3	6.60	420095	81/2	3	8.60

STYLE H WALL FIXTURE

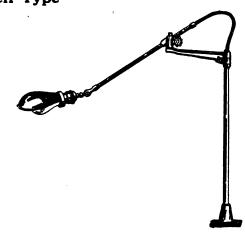
This fixture permits the upper arm to be turned up or down to a vertical position parallel to the wall. The fixture can be folded up against the wall from any position and at any angle. 420096 11/2 11/2 \$5.30 || 420101 31/2 \$6.60

\$5.30 3 3 3 420097 2 5.60 420102 6.80 5.80 420098  $\bar{\mathbf{2}}$ 420103 41/2 7.00 420099 6.10 420104 6.40 420100

Note: Black finish sent unless otherwise ordered, on all factory fixtures, but they can be furnished in any finish desired for use in hospitals, offices, etc. Prices in finishes other than black, on request.

# WHITE ADJUSTABLE FIXTURES Factory Bench Type





Style 1D

Style 3D

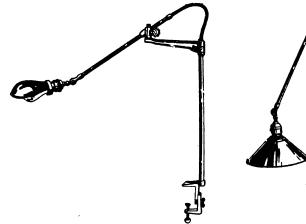
### STYLE 1D BENCH FIXTURE

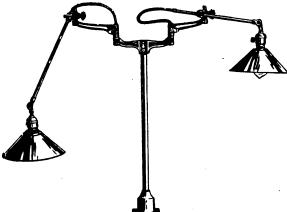
This fixture is for direct attachment to work bench. Can be furnished with base for side attachment instead of regular base. Wires through lamp arm only. Height 24 inches, spread 25 inches.

List		Price
No.	Description	Each
1D	Fixture as shown, less shade, socket and wiring. Plain black finish	<b>\$</b> 4.60

#### STYLE 3D BENCH FIXTURE

This fixture is much heavier in construction than the No. 1D, and is thoroughly insulated for wiring through the upright as well as the lamp arm. Height 24 inches, spread 26 inches. 3D Fixture as shown, less shade, socket and wiring. Plain black finish...





Style 4D

STYLE 4D BENCH FIXTURE

Style 1DD

This fixture is arranged for clamping on bench or lathe. Clamp is adjustable for receiving thicknesses varying from one to four inches. It is quickly and easily adjusted. The fixture is firm and rigid and will stand the most severe usage. Regular size has 24 inch upright, 8 inch crank arm and 18 inch lamp arm.

		List
List		Price
No.	Description	Each
4D	Fixture as shown, less shade, socket and wiring. Black finish	<b>\$</b> 6.30

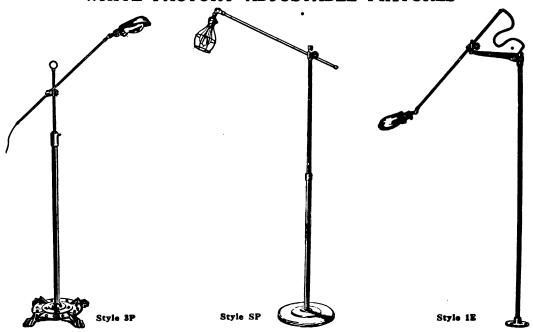
STYLE 1DD BENCH FIXTURE

This style of fixture is exceptionally convenient and useful where the work is spread over a considerable area on a bench or large desk. The regular size of the fixture has a 28 inch upright, 7 inch crank arms and 18 inch lamp arms.

Fixture as shown, less shade, socket and wiring. Black finish..... 1DD NOTE: Black finish sent unless otherwise ordered, on all factory fixtures, but they can be furnished in any finish desired for use in hospitals, offices, etc. Prices in finishes other than black, on request.

\*Delivery F. O. B. Factory, Worcester, Mass. For warehouse deliveries write nearest house.

# WHITE FACTORY ADJUSTABLE FIXTURES



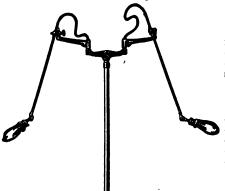
STYLE 3P FLOOR PORTABLE

This floor portable is designed especially to meet the requirements of surgeons, dentists oculists and the like. List No. \*List Price Description 3P Portable as shown, less shade, socket and wiring, regular finish, black japanned base and

..... \$14.00 upright, nickel arms..... 3P 18.00 3P 18.00

This floor portable is very heavily constructed to withstand the roughest handling in machine shops, mills, automobile repair shops and garages. Prices cover black finish only, and do not include shade, socket or wiring.

SP Portable. Height of upright 51/2 feet, length of lamp arm 21/2 feet...... SP Portable wired complete with key socket, 25 ft. of heavy reinforced cord and separable plug. 13.50



# STYLE 1E FLOOR STANDARD

This fixture is designed for use where it is necessary to lead wires from the floor to the lamp. The fixture is very rigid and strong and will withstand the severest usage. It is especially adapted for use in shops having extremely high ceilings. Prices cover black finish only, and do not include shade, socket or wiring. -Length-

List No.	Upright Arm—Feet	Crank Arm—Feet	Lamp Arm—Feet	*List Price
420166	41/2	10	11/2	<b>\$</b> 6.40
420167	5 -	10	11/2	<b>6</b> .70
420168	51/2	10	2	7.10
420169	6	10	2	7.40
420170	61/2	10	$2\frac{1}{2}$	7.80

#### STYLE 1EE FLOOR STANDARD Style 1E but with two lights

bame	as Style IL, Du	t with two ngi	168.	
420171	41/2	7	11/2	\$12.00
420172	5	7	$1\frac{1}{2}$	12.30
420173	51/2	7	2	12.80
420174	6	7	${f 2}$	13.10
420175	$6\frac{1}{2}$	7	21/2	13.60

Note: Black finish sent unless otherwise ordered, on all factory fixtures, but they can be furnished in any finish desired for use in hospitals, offices, etc. Prices in finishes other than black, on request.

\*Delivery F. O. B. Factory, Worcester, Mass. warehouse deliveries write nearest house.

Style 1EE

# Western Electric

## **BENJAMIN FIXTURES**







List No. 772C



List No. 780C

# Single Units

#### FOR 100 TO 500 WATT MAZDA C LAMPS

#### Sockets are National Electrical Code Standard

Schedule 2C

Fixtures 701C-714C include ventilated hoods and holders of material as listed, stalactite globe of correct density, and two piece easy to wire porcelain socket with Benjamin lamp grip. Flange is securely attached to hood so that support of fixture does not depend on socket. 100-200 watt fixtures have one piece hood, while 300-500 watt fixtures have two-piece hood to provide for greater ventilation. Fittings are regularly supplied for ½ inch pipe; ¾ inch may be ordered without change in price, or ¾ inch at an advance of \$0.17 list. Mfrs. list \$0.10.

Ventilation. Globes are regularly furnished with hole in bottom, in line with general practice, although globe ventilation is rarely necessary on account of the adequate provision made in Benjamin fixture hoods. Globes without hole will be furnished when specified, without change in price. Globes list as follows: 7 x 5 inches, \$1.19; Mfrs. list \$0.70; 8 x 6 inches, \$1.53; Mfrs. list \$0.90. Spherical globes of same dimensions may be ordered without advance in price.

List No.	Kind of Hood	Finish	Length Fixture Inches	Size of Globe Inches	Size of Lamps Watts	Mfrs. List	W. E. List Price
701C	Copper	Natural	12	7 x 5	100, 200	\$2.30	\$3.91
703C	Copper	Black enamel	12	7 x 5	100, 200	2.40	4.08
705C	Brass	Brushed	12	7 x 5	100, 200	2.50	4.25
707C	Steel	Black enamel	12	7 x 5	100, 200	1.80	3.06
708C	Copper	Natural	131/2	8 x 6	300, 400, 500	3.20	5.44
710C	Copper	Black enamel	$13\frac{1}{2}$	8 x 6	300, 400, 500	3.30	5.60
712C	Brass	Brushed	$13\frac{1}{2}$	8 x 6	300, 400, 500	3.40	5.78
714C	Steel	Black enamel	$13\frac{1}{2}$	8 x 6	300, 400, 500	2.30	3.91

### SUSPENSION STYLES

Fixtures 772C-779C are like the above with chain suspension,  $5 \times 4$  inch canopy, crowfoot, and  $\frac{1}{2}$  inch brass loop drilled to take No. 14 asbestos covered wire. For globes see above.

772C	Brass	Brushed	26	7 x 5	100, 200	\$3.60	\$6.12
773C	Steel	Black enamel	26	7 x 5	100, 200	2.90	4.93
778C 779C	Brass Steel	Brushed Black enamel	$27\frac{1}{2}$ $27\frac{1}{2}$	8 x 6 8 x 6	300, 400, 500 300, 400, 500	4.50 3.40	7.65 5.78

#### REFLECTOR STYLES

Fixtures 780C-787C are substantially 701C-714C, with flat cone enameled steel reflector added. For 18 inch reflector with Nos. 784C-787C, add \$0.85 list; Mfrs. list \$0.50. Reflectors are finished black.

780C	Copper	Natural	12	7 x 5	100, 200	\$3.30	\$5.60
781C	Copper	Black enamel	12	7 x 5	100, 200	3.40	5.78
783C	Steel	Black enamel	$1\overline{2}$	7 x 5	100, 200	2.80	4.76
784C	Copper	Natural	15	8 x 6	300, 400, 500	4.70	7.99
785C	Copper	Black enamel	15	8 x 6	300, 400, 500	4.80	8.16
787C	Steel	Black enamel	15	8 x 6	300, 400, 500	3.80 $_{\scriptscriptstyle \parallel}$	6.46

Prices are less wires and lamps.

# BENJAMIN LIGHTING FIXTURES



List No. 752C





Mail Orders Filled at Prevailing Prices

List No. 757C

Single Units

# Sockets are National Electrical Code Standard

Schedule 2C

Fixtures 751C-764C have Benco porcelain lined socket, tapped ½ inch, ventilated deep holder, and stalactite diffusing globe as indicated. Sockets tapped ¾ inch furnished without change in price. Globes are furnished with bottom opening. Benjamin lamp grip, to prevent loosening of lamps, furnished at an advance of \$0.17 list; Mfrs. list \$0.10. Corresponding sizes of ball globes furnished without change in price. Standard finish is brush brass.

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				Globe Univ——		Complete	
List	Length of	Size of	Size of Lamps	Mfrs. List	W. E. List	Mfrs. List	W. E. List
No.	Fixture	Globe	Watts	Price	Price	Price	Price
751C	10 ins.	6 x 4 ins.	25, 40, 60	<b>\$</b> 0.70	\$1.19	\$1.70	\$2.89
752C	11 ins.	7 x 5 ins.	100, 200	.80	1.36	2.00	3.40
753C	12 ins.	8 x 6 ins.	200	.90	1.53	2.30	3.91
754C (Mogul)	13 ins.	8 x 6 ins.	300, 400, 500	.90	1.53	2.90	4.93

Fixtures 756C-758C have Benco porcelain lined socket with ventilated holder as indicated, standard 8 inch stem of  $\frac{5}{2}$  inch brass tubing,  $5 \times 4$  inch canopy and crowfoot. Additional length stems list at \$0.51 per foot; Mfrs. List \$0.30. No. 759C has 12 inch stem of  $\frac{5}{2}$  inch iron pipe and  $\frac{5}{2}$  inch brass casing. Additional length stems list at \$0.85 per foot; Mfrs. List \$0.50. For Benjamin lamp grip, add \$0.17 to list. Standard finish is brush brass. Prices do not include glassware.

List	Size	Holder	Length	Size of Lamps	Mfrs. List	W. E. List
No.		Form	Less Glass	Watts	Price	Price
756C	2¼ ins.	Ö	11 ins.	25, 60	\$1.55	\$1.32
757C	2¼ ins.	H	12 ins.	100	1.70	2.89
758C	3¼ ins.		12 ins.	200	1.75	2.98
759C (Mogul)	3¼ ins.		16 ins.	300, 500	2.75	4.68

#### CHAIN SUSPENSIONS

Fixtures 761C-764C have Benco socket, ventilated holder as listed, chain suspension extending 14 inches from socket to top of canopy, 5 x 4 inch canopy, and crowfoot. Extra length chains list at \$0.85 per foot; Mfrs. List \$0.50. Stalactite globes of sizes indicated, with bottom opening, furnished regularly, but ball globes in corresponding sizes can be supplied without change in price. Chain loops are drilled to take No. 14 asbestos covered wire. Standard finish is brush brass.

				Globe Only		Complete	
List	Length of	Size of	Size of Lamps	Mfrs. List	W. E. List	Mfrs. List	W. E. List
No.	Fixture	Globe	Watts	Price	Price	Price	Price
761C	23 ins.	6 x 4 ins.	25, 40, 60	<b>\$</b> 0.70	\$1.19	\$2.80	\$4.76
762C	24 ins.	7 x 5 ins.	100, 200	.80	1.36	3.10	5.27
763C	26 ins.	8 x 6 ins.	200	.90	1.56	3.40	<b>5</b> .78
764C (Mogul)	27 ins.	8 x 6 ins.	300, 400, 500	.90	1.53	4.00	6.80
Prices are	less wires a	and lamps.		D	igitized by <b>G</b>	oogle	
			48		.5	0	

## BENJAMIN LIGHTING FIXTURES







List No. 515P

List No. 22H

Cluster Ceiling Units

#### Schedule 2

Fixtures 512P-516P have cluster body, opal reflector, and adjustable sub-base which may be attached directly to ceiling or outlet box. Removable strap is also provided, tapped for  $\frac{3}{8}$  inch iron pipe for connecting with fixture stud. For fixtures less reflector, deduct \$0.84 list; Mfrs. List \$0.60. Standard finish is brush brass.

#### TYPE 1 BODY

List No.	No. of Lights	Size of Reflector	Size of Lamps, Watts	Mfrs. List Price	W. E. List Price
512 <b>P</b>	2	14 ins.	25 to 100	<b>\$</b> 2.70	<b>\$</b> 3.78
513 <b>P</b>	3	14 ins.	25 to 100	2.95	4.14
514P	4	14 ins.	25 to 100	3.20	4.48
515 <b>P</b>	5	14 ins.	25 to 100	3.45	4.84
516P	6	14 ins.	25 to 100	3.70	5.18

Fixtures 22H-16H are provided with cluster body less flange. 15 inch porcelain enameled steel reflector is included in price. Reflector is placed between cluster back and ceiling.

Fixtures 322P-323P have ornamental sub-base with 15 inch opal reflector. Standard finish is brush brass.

List No.	Cluster Boo Type No.		Mfrs. List Price	W. E. List Price
22H	2	2 light fixture, with 15 in. enameled steel reflector	<b>\$2.25</b>	<b>\$3</b> .16
23H	2	3 light fixture, with 15 in. enameled steel reflector	2.80	3.92
12H	1	2 light fixture, with 15 in. enameled steel reflector	2.80	3.92
13 <b>H</b>	1	3 light fixture, with 15 in. enameled steel reflector	3.05	4.28
14H	1	4 light fixture, with 15 in. enameled steel reflector	3.30	4.62
15H	1	5 light fixture, with 15 in. enameled steel reflector	3.55	4.98
· 16H	. 1	6 light fixture, with 15 in. enameled steel reflector	3.80	5.32

#### TYPE 2 BODY

List No.	No. of Lights	Size of Reflector	Size of Base	Size of Lamps Watts	Mfrs. List Price	W. E. List Price
322P	2	14 ins.	$6 \times 3\frac{1}{4}$ ins.	25 to 100	<b>\$</b> 3.10 ·	\$4.34
323P	3	14 ins.	$6 \times 3\frac{1}{4}$ ins.	25 to 100	3.35	4.70



List No. 333B

Fixtures 332B-333B have cluster body, with ornamental sub-base, and opal ball globe. Globe only lists at \$1.68; Mfrs. List \$1.20 Standard finish is brush brass.

#### TYPE 3 BODY

List No.	No. of Lights	Size of Globe	Size of Base	Size of Lamps Watts	Mfrs. List Price	W. E. List Price
332B	2	$8 \times 6\frac{1}{2}$ ins.	9 ins.	25 to 60	<b>\$</b> 5.20	\$7.28
333B	3	$8 \times 6\frac{1}{2}$ ins.	9 ins.	25 to 60	5.45	7.62

Prices are less wires and lamps.

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# BENJAMIN INDUSTRIAL FIXTURES



# Special Units

#### Sockets and Clusters are National Electrical Code Standard

Schedule 2

Fixtures 1234-1236 have 20 inch two-way reflector with ventilated copper hood, and two-piece easy-to-wire porcelain socket with Benjamin Lamp Grip. As a scientifically constructed parabolic reflector it projects the light in opposite directions, thereby adapting the fixture for an economical lighting of narrow passages, such as occur in warehouses and stock rooms. Its weatherproof qualities recommend it for out-door use in the lighting of roadways, alleys, railroad crossings, bridges, tunnels and platforms. Prices are less wires and lamps.

List	No. of	Size of	Size of Lamps	Mfrs. List	W. E. List
No.	Lights	Reflector	Watts	Price	Price
1234	1	<b>20</b> ins	60	<b>\$</b> 6.00	\$8.40
1235	1	20 ins.	100	6.50	9.10
1236	1	20 ins.	200	7.00	9.80

Fixtures T784-T804 are designed for use in mills and other places where high mounting height is preferable. They have shallow parabolic porcelain enameled steel reflector, clear glass globe, weatherproof porcelain connecting block, and suspension loop. Globe may be removed, or suspended and held in position by means of rod passing through hollow support. Fixtures are wired. For fixtures less crossarm and suspension fitting, deduct \$2.10 list. Mfrs. List \$1.50.

List No.	No. of Lights	Size of Reflector	Size of Globe	Size of Lamps Watts	Mfrs. List Price	W. E. List Price
T-784	4	24 ins.	$11\frac{1}{4} \times 10\frac{1}{4}$ ins.	100	\$14.00	\$19. <b>60</b>
T-785	5	24 ins.	$11\frac{1}{4} \times 10\frac{1}{4}$ ins.	100	14.30	20.02
T-794	4	24 ins.	Less globe	100, 200	11.50	16.10
T-795	5	24 ins.	Less globe	100	11.80	16.52
T-804	4	24 ins.	$12\frac{3}{4} \times 11$ ins.	200	14.50	20.30

# Cargo Lights

Fixtures 674-676 are designed for special service around wharves, steamship holds, in building and general construction work. Metal parts are non-corrosive and durable. Fixtures consist of a 16 inch copper hood—white enameled inside, black on outside—with Type 1 cluster body, and a strong galvanized iron guard. Rope suspension fitting facilitates ready adjustment. Prices are less wires and lamps.

List	No. of	Size of	Size of Lamps	Mfrs. List	W. E. List
No.	Lights	Reflector	Watts	Price	Price
674	4	16 ins.	25, 40, 60	\$12.00	\$16.80
675	5	16 ins.	25, 40, 60	12.25	17.16
676	6	16 ins.	25. 40, 60	Digitized b <b>12.50</b> 00910	17.50
Lighting Fi	ztures and Accessor	ies	55	O	

## BENJAMIN STORE AND OFFICE FIXTURES

Sockets are National Electrical Code Standard









A Method of Attaching

List No. 4306

List No. 4340

List No. 4345

# Ceiling Units

Schedule 2

Benjamin ceiling units embody the principles of fixture uniformity plus expansibility. Uniformity is secured through a fixed type of base, and expansibility through the variety of sizes offered by Type "S" screw threaded interchangeable shade holders.

Fixtures with  $3\frac{1}{4}$  inch holder will accommodate 200 watt Mazda C lamps, but it is necessary that 12 inches of No. 14 asbestos covered wire be inserted between house wires and fixture terminals, to prevent high temperatures in the former. When specified, proper length of wire will be furnished, unattached, without extra charge. Where No. 14 approved wire is used with keyless sockets, no insulating joint or ring is required. For Benjamin lamp grip add \$0.14 list. Mfrs. List \$0.10.

#### **ENAMELED STEEL BASES**

Fixtures 4302-4306 have easy-to-wire porcelain socket and white enameled steel base held by screw threaded ring on outside of socket shell, making it unnecessary for screws to pass through the enamel. Shade holders are covered by white enameled cap.

List	Size of	Size of	Form of	Size of Lamps	Mfrs. List	W. E. List
No.	Base	Holder	Holder	Watts	Price	Price
4302	10 ins.	$2\frac{1}{4}$ ins.	О	<b>25, 40, 60</b>	<b>\$</b> 4.25	<b>\$5</b> .96
4304	10 ins.	$2\frac{1}{4}$ ins.	H	100	4.35	6.10
4306	10 ins.	$3\frac{1}{4}$ ins.		200	4.40	8.16

#### **BRUSH BRASS BASES**

Fixtures 4312-4342 have easy-to-wire socket, brass base and heavy steel strap for attaching to outlet box or ceiling. Interchangeable shade holders can be used with this unit.

List No.	Size of Base	Size of Holder	Form of Holder	Size of Lamps Watts	Mfrs. List Price	W. E. List Price
4312	10 ins.	Less holder			\$2.60	\$3.64
4340	10 ins.	$2\frac{1}{4}$ ins.	O	25, 40, 60	2.75	3.86
4341	10 ins.	$2\frac{1}{4}$ ins.	H	100	2.90	4.06
4342	10 ins.	$3\frac{1}{4}$ ins.		200	2.95	4.14

Fixtures 4314-4345 are essentially those above with 8 instead of 10 inch bases. They are furnished with strap for attaching to outlet box. For holders only, see below.

List No.	Size of Base	Size of Holder	Form of Holder	Size of Lamps Watts	Mfrs. List Price	W. E. List Price
4314	8 ins.	Less holder			\$2.00	\$2.80
4343	8 ins.	$2\frac{1}{4}$ ins.	0	25, 40, 60	2.15	3.02
4344	8 ins.	$2\frac{1}{4}$ ins.	H	100	2.30	3.22
4345	8 ins.	3¼ ins.		200	2.35	3.30

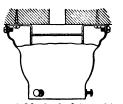
Benco pull chain sockets with Benjamin lamp grip supplied with any of above fixtures at an advance of \$0.56 list. Mfrs. list \$0.40.

Prices are less wires, lamps and glassware.

# BENJAMIN STORE AND OFFICE FIXTURES







List No. 4318

A Method of Attaching

# Ceiling Units

#### BRUSH BRASS BASES

Schedule 2

Fixtures 4316-4319 have brass base with Benco porcelain-lined socket permanently attached. Unlike the units shown on preceding page the socket is uncovered. Fixtures are supplied with strap for attaching to outlet box. For Benjamin lamp grip, a device to prevent loosening of lamps, add \$0.14 list. Mfrs. list \$0.10. Benco Pull Chain Socket with Lamp Grip incorporated in fixture at an advance of \$0.56 list. Mfrs. list \$0.40. Standard finish is brush brass.

List	Size of	Size of	Form	Size of Lamps	Mfrs. List	W. E. List
No.	Base	Holder	Holder	Watts	Price	Price
4316	6 ins.	Less holder			\$1.10	\$1.54
4317	6 ins.	$2\frac{1}{4}$ ins.	0	25, 40, 60	1.25	1.76
4318	6 ins.	$2\frac{1}{4}$ ins.	H	100	1.40	1.96
4319	6 ins.	$3\frac{1}{4}$ ins.		200	1.45	2.04

## **CEILING UNITS**

#### One-piece Shell and Holder

Fixtures 361-382 have brass or copper body with holders as indicated, supporting strap, and two-piece, easy-to-wire porcelain receptacle. The latter completely encloses connections, making insulating joint unnecessary where approved No. 14 rubber covered wire is used.

The shell may be attached or removed after connections have been made by merely loosening the screws of the top rim.

Three methods of attaching are possible:

- 1. Directly to the ceiling or wooden block by means of wood screws.
- 2. To the ceiling plate, either by a lock-nut to pipe support, or by strap to fixture stud.
- 3. Directly to outlet box, thus taking the place of cover.

Benjamin Lamp Grip is furnished at an advance of \$0.07 list. Mfrs. list \$0.05. Standard finish of brass body is brush; copper body is natural finish.

#### **BRASS BODY—LESS GLASSWARE**

List	Size of	Size of	Form	Size of Lamps	Mfrs. List	W. E. List
No.	Base	Holder	Holder	Watts	Price	Price
361	6 ins.	$2\frac{1}{4}$ ins.	0	<b>25,</b> 40, <b>60</b>	\$1.50	\$2.10
371	6 ins.	$2\frac{1}{4}$ ins.	H	100	1.70	2.38
381	6 ins.	$3\frac{1}{4}$ ins.		100	1.80	2.52

# Holders for Brush Brass Fixtures

		Brush Brass Holders			5	chedule 3
List No.	Size		List Price	Std. · Pkg.	Wt., Lbs.	W. E. List Price
*4377	$2\frac{1}{4}$ ins.	Form "O" Holder	\$0.20	50	2	\$0,21
*4378	$2\frac{1}{4}$ ins.	Form "H" Holder	.35	50	3	.42
*4379	$3\frac{1}{4}$ ins.	Holder	.40	50	8	.49
*4380	4 ins.	Holder	.70	50	9	. <b>98</b>
*4381	5 ins.	Holder	1.00	50	9	1.40
<b>4382</b>	6 ins.	Holder	1.20	<b>50</b>	13	1.68
*Ver	itilated.		Diaitized	by <b>GO</b> (	ogle	

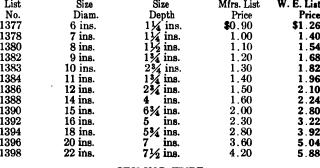
# BENJAMIN SPECIALTIES Lock Guards

#### PENDENT TYPE

Schedule 2

These guards have a grooved band and eye-bolt for attaching to the head of an enameled steel reflector. The band has a hinged connection, and a catch on the opposite side for holding the guard in position. Padlock may be passed through the rim and eye-bolt for locking. Lock nut on the bolt furnishes means for attaching ground wire when it is desirable to protect lamps against static currents. These pendent guards cover the entire range of Benjamin standard fixtures with enameled steel reflectors. Their depth is designed with reference to the largest lamps likely to be used. The diameter of the reflector determines the diameter of the guard. Flat cone and bowl type reflectors of the same diameter will take the same size guard.

or me sa	me diameter wi	n rake de same	size guaru.	
List	Size	Size	Mfrs. List	W. E. List
No.	Diam.	Depth	Price	Price
1377	6 ins.	11/4 ins.	<b>\$0</b> .90	\$1.26
1378	7 ins.	$1\frac{1}{4}$ ins.	1.00	1.40
1380	8 ins.	1½ ins.	1.10	1.54
1382	9 ins.	$1\frac{3}{4}$ ins.	1.20	1.68
1383	10 ins.	$2\frac{3}{4}$ ins.	1.30	1.82
1384	11 ins.	$1\frac{3}{4}$ ins.	1.40	1.96
1386	12 ins.	2¾ ins.	1.50	2.10
1388	14 ins.	4 ins.	1.60	2.24
1390	15 ins.	$6\frac{3}{4}$ ins.	2.00	2.80
1392	16 ins.	5 ins.	2.30	3.22
1394	18 ins.	5¾ ins.	2.80	3.92
1396	20 ins.	7 ins.	3.60	5.04
1398	22 ins.	7½ ins.	4.20	5.88



#### **CEILING TYPE**

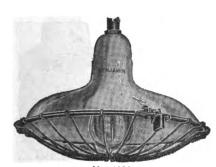
Guards 1350-1360 have hinge adapted for attaching to the Guards 1350-1360 have hinge adapted for attaching to the ceiling by two wood screws, and a fastening plate opposite the hinge, likewise attached by screws. The plate is designed to receive a loop on the guard, thus providing supporting means. Padlock may be used if desired. When in position, guard renders the attaching screws inaccessible; released, it swings clear of the fixture, making it easy to clean or change lamps. Wire parts are of strong steel, tinned after welding. Fittings are galvanized. Guards with dagger (†) are furnished on special order only, and require two weeks' notice. Prices are less brass padlock shown. padlock shown.

List	Size	\$	Size	Mfrs. List	W. E. List
No.	Diam.	De	epth	Price	Price
†1350	10 ins.	7	ins.	\$1.20	\$1.68
†1352	12 ins.	8	ins.	1.40	1.96
†1354	14 ins.	9	ins.	1.60	2.24
1356	16 ins.	63/	ins.	1.80	2.52
1358	18 ins.	83	ins.	3.00	4.20
1360	20 ins.	11	ins.	4.00	5.60
_		_			_

Guards 1362-1374 have strong cylindrical upper guard adapted for attaching to the ceiling by three or more screws, and a lower or shallower portion hinged to it at the bottom. They are particularly designed for single unit ceiling fixtures. Where necessary to prevent removal, screws may be soldered in position. Lower part may be swung clear of the fixture while changing or cleaning lamps. Wire parts are of strong steel, tinned after welding. Fittings are galvanized. Guards with dagger (†) are furnished on special order only, and require two weeks' notice. Prices are less brass padlock shown.

		indrical		nged		
	G	luard	Gi	ıard		
List	Diam.	Depth	Diam.	Depth	Mfrs. List	W. E. List
No.	Ins.	Ins.	Ins.	Ins.	Price	Price
†1362	11	·8	11	13/4	\$1.60	\$2.24
†1364	11	10	11 .	13/4	1.70	2.38
†1366	11	12	11	13/4	1.80	2.52
†1368	14	10	14	4	2.20	3.08
†1370	14	12	14	4	2.50	3.50
†1372	18	12	18	53/4	4.20	5.88
†1374	18	16	18	53/4	4.80	6.72
	D	• •			-1	

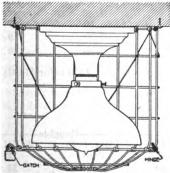
Note: Prices given do not include brass padlock. padlock and two keys, add \$0.170 list. by Mfrs. Mst \$0.50.



No. 1386 (Pendent Guard



No. 1356 Ceiling Guard



List No. 1364 Ceiling Guard

# GAS AND VAPOR-PROOF FIXTURES

#### Sockets are National Electrical Code Standard







List No. 1580

List No. 1566

# Gas and Vapor-proof Fixtures

#### Schedule 2

Benjamin Gas and Vapor-proof Fixtures are single units with the lamp tightly enclosed as a protective measure. They are safety lights for industrial plants, such as powder mills, benzol plants, paint manufactories, and other places subjected by exposed lights to danger from explosive gases or dust accumulation. They are protected units for use on steam vessels, around wharves and other marine service. A special gasket between globe and hood makes the fixture tight.

Fixtures 1553-1558 consist of cast iron hood tapped for ½ inch stem, two-piece, easy-to-wire porcelain receptacle with Benjamin lamp grip, screw threaded enclosing globe, aluminum globe holder, and reflector as indicated. Iron parts are galvanized.

#### With Flat Cone Reflectors

List	Size of	Diam. of	Size of Lamps,	Mfrs. List	W. E. List
No.	Reflector	Globe	Watts	Price	Price
1553	15 ins.	4 ins.	25, 40, 50, 60	<b>\$4</b> .00	<b>\$5.60</b>
1555	16 ins.	5 ins.	75, 100	5.00	7.00
1557	18 ins.	$6\frac{1}{2}$ ins.	150 ′	6.00	8.40
1558	18 ins.	8 ins.	200, 250	6.50	9.10

Fixtures 1578-1580 are the same as above, with shallow bowl porcelain enameled steel reflector substituted. No. 1580 is for Mazda C lamps only.

#### With Shallow Bowl Reflectors

List	Size of	Diam. of	Size of Lamps,	Mfrs. List	W. E. List
No.	Reflector	Globe	Watts	Price	Price
1578	15 ins.	5 ins.	75, 100	<b>\$</b> 5.50	<b>\$7</b> . <b>70</b>
1579	16 ins.	8 ins.	150, 200, 250	6.50	9.10
1580 (Mogul)	18 ins.	10 ins.	300, 400, 500	7.50	10.50

Fixtures 1563-1570 are without reflectors, otherwise the same as above. No. 1570 is for Mazda C lamps only.

#### Without Reflector

			Glob	e Only	Comple	te
List	Diam. of	Size of Lamps,	Mfrs. List	W. E. List	Mfrs. List	W. E. List
No.	Globe	Watts	Price	Price	Price	Price
1563	4 ins.	<b>25, 40, 50, 60</b>	<b>\$</b> 0.50	<b>\$</b> 0.70	\$2.20	<b>\$3.08</b>
1565	5 ins.	75, 100	.80	1.12	3.20	4.48
1566	$6\frac{1}{2}$ ins.	150	1.50	2.10	3.50	4.80
1568	8 ins.	150, 200, 250	2.00	2.80	4.00	5.60
1570	10 ins.	300, 400, 500	2.50	<b>3.50</b> gitized	by <b>4.50</b> 210	6.30
Lighting	Fixtures and Ac	Cessories	58-1		O	

# MOISTURE AND DUSTPROOF FIXTURES

#### Sockets are National Electrical Code Standard







# Moisture and Dustproof Fixtures

Schedule 2

Fixtures 617-631 are moisture proof units consisting of weather proof porcelain-lined socket, non-corroding globe holder, special gasket and screw threaded enclosing globe as indicated. Bushing tapped for ½ inch stem. For Benjamin lamp grip, add 14 cents list.

List	——Size of	f Globe	Color of	Size of Lamps	Mfrs. List	W. E. List	Mfrs. List	W. E. List
No.	Diam.	Depth	Globe	Watts	Globe Only	Globe Onl <del>y</del>	Complete	Complete
617	$3\frac{1}{4}$ ins.	41/4 ins.	Clear	25, 40	<b>\$</b> 0.40	<b>\$0.59</b>	<b>\$</b> 1.30	\$1.90
628	4 ins.	5 ins.	Clear	40, 60	.50	.74	1.50	2.20
630	<b>5</b> ins.	6 ins.	Clear	100	.80	1.16	1.90	2.78
631	4 ins.	5 ins.	Ruby	40, 60	2.40	3.51	3.40	4.97
1415	Screw wire gu	ard for 4 x 5	in. globe.				1.00	1.46

Moisture proof Outlet Box Units 634-648 have galvanized cast iron outlet box with pipe openings tapped either ½ inch or ¾ inch, as specified, non-corroding globe holder, screw-threaded deep enclosing globe, and porcelain receptacle. A special gasket renders the fixture moisture-tight. List prices apply to two-way outlet box; for three-way box, add 14 cents list; for four-way, add 28 cents list.

List	——Size of	Globe	Color of	Size of Lamps	Mfrs. List	W. E. List	Mfrs. List	W. E. List
No.	Diam.	Depth	Globe	Watts	Globe Only	Globe Only	Complete	Complete
634	4 ins.	5 ins.	Clear	25, 40, 60	\$0.50	\$0.74	\$1.50	\$2.20
646	<b>5</b> ins.	6 ins.	Clear	100	.80	1.16	1.90	2.78
647	4 ins.	5 ins.	Ruby	25, 40, 60	2.40	3.51	3.40	4.97
648	2 way box, le	ess globe and	l holder			· · · · · · · · · · · · · · · · · · ·	.80	1.17
1415	Screw wire g	uard for 4 x	5 in. globe.				1.00	1.46

## **DUSTPROOF FIXTURES**

Fixtures 883-894 are dustproof devices for use in foundries, mills, etc. They have 20 inch porcelain enameled steel reflector, standard 8 inch stem of ½ inch iron pipe, separable suspension fitting, and globe as indicated. A special gasket between globe and reflector renders them dustproof. Globe may be removed, or suspended and held in position by means of rod passing through hollow support. For Benjamin lamp grip, add 7 cents per outlet. Iron parts are galvanized.

List	No. of	Size of	Size of Lamps	Mfrs. List	W. E. List	Mfrs. List	W. E. List
No.	Lights	Globe	Watts	Globe Only	Globe Only	Complete	Complete
883	3	$10\frac{1}{4} \times 11\frac{1}{4}$ ins. $10\frac{1}{4} \times 11\frac{1}{4}$ ins. $10\frac{1}{4} \times 11\frac{1}{4}$ ins.	60, 100	\$2.00	\$2.92	\$10.25	\$13.32
884	4		60, 100	2.00	2.92	10.55	13.72
885	5		60, 100	2.00	2.92	10.85	14.10
886 894	6 4	$10\frac{1}{4} \times 11\frac{1}{4} \text{ ins.}$ $10\frac{1}{4} \times 11\frac{1}{4} \text{ ins.}$ $11 \times 12\frac{3}{4} \text{ ins.}$	60 200	2.00 2.00 2.50	2.92 2.92 3.67	11.15 11.05	14.10 14.50 14.36

Prices are less wires and lamps.

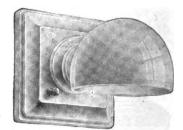
# THE AGLITE AND BRASCOLITE FIXTURES







No. S-10489

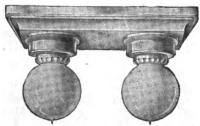


No. S-10491

# "Aglite" All Glass Fixtures

The Aglite all glass fixtures will not crack, check, discolor or become tarnished.

Lis <b>t</b> No.	Receptacle	Shade	Switch	List Price   Each	List No.	Receptacle	Shade	Switch	List Price Each
S-10487	1	No	No	\$2.70	S-10491	i	1	No	<b>\$</b> 3.98
S-10488	1	No	1	5.02	S-10492	ī	î	1	6.30
S-10489	1	1	No	3.82	S-10497	$ar{2}$	ĩ	No	6.30
S-10490	1 ·	1	1	6.16	S-10498	2	ī	1	8.62



No. S-10493



No. S-10495

# "Aglite" All Glass Fixtures

Being constructed of all white glass Aglite fixtures harmonize perfectly with hospital furniture, producing an illumination that is pleasing and restful.

List		• -	Ü	List Price	List				List Price
No.	Receptacle	Shade	Switch	Each	No.	Receptacle	Shade :	Switch	Each
S-10493	2	No	No	\$4.96	S-10495	<b>2</b>	2	No	\$7.80
S-10494	<b>2</b>	No	1	7.28	S-10496	<b>2</b>	<b>2</b>	1	10.12

The above prices are for fixtures complete, excepting lamps. If switch is desired specify whether turn or full chain is wanted.



Type MD



Type ND

# Type MD AND ND BRASCOLITES ROSE DECORATED BOWLS IN NATURAL COLORS REFLECTOR, WHITE ENAMEL STEEL

Туре	Size	Outside Diameter	Bowl	Shpg. Weight	List Price Each
MD MD ND ND	100 or 200 watt medium socket, any std. finish	19 ins. 16 ins.	12 ins. 14 ins. 12 ins. 14 ins.	20 lbs. 35 lbs. 20 lbs. 35 lbs.	\$23.76 29.04 25.14 32.34

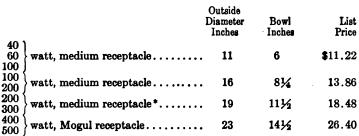
\*Mogul socket for 19 inch size \$1.32 additional. Delivery F. O. B. Factory, St. Louis, Mo. For warehouse deliveries write nearest house.

# Western Electric

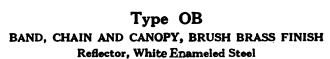
# **BRASCOLITES**



BAND. DULL BRASS FINISH Reflector White Enameled Steel



\*Mogul receptacle for 19 inch size, \$1.32 additional. Pull switch concealed in body and wired, \$1.98 additional. Finishes other than specified will delay shipment.



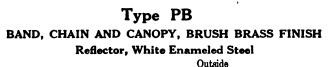
	Outside Diameter Inches	Bowl Inches	List Price
watt, medium receptacle	11	6	\$15.84
watt, medium receptacle	16	81/4	18.48
watt, medium receptacle*	19	111/2	24.76
watt, Mogul receptacle	23	141/2	<b>32</b> .68
	watt, medium receptacle  watt, medium receptacle  watt, medium receptacle*	watt, medium receptacle	watt, medium receptacle

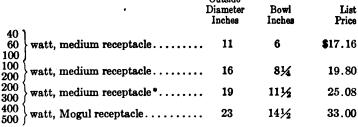
\*Mogul receptacle for 19 inch size, \$1.32 additional.

Pull switch concealed in body and wired, \$1.98 additional.

Finishes other than specified will delay shipment.

Standard length, 4 feet. Additional length per foot, 66 cents.





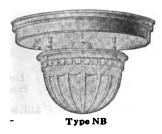
\*Mogul receptacle for 19 inch size, \$1.32 additional.

Pull switch concealed in body and wired, \$1.98 additional.

Standard length, 4 feet. Additional length per foot, 66 cents.

Finishes other than specified will delay shipment.

Delivery F. O. B. St. Louis, Mo. For warehouse deliveries write Digitized by GOOGLE nearest house.



Type OB

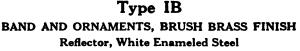


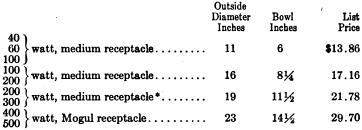
Type IB

# Western Electric

## **BRASCOLITES**







\*Mogul receptacle for 19 inch size, \$1.32 additional.

Pull switch concealed in body and wired, \$1.98 additional.

Finishes other than specified will delay shipment.



Type JB
BAND, ORNAMENTS, CHAIN AND CANOPY, BRUSH
BRASS FINISH

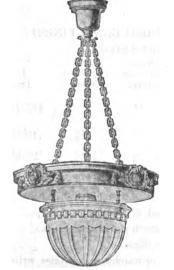
Reflector, White Enameled Steel

		Outside Diameter Inches	Bowl Inches	List Price
40	)		_	
60	watt, medium receptacle	11	6	<b>\$</b> 18.48
100	)			
100	watt, medium receptacle	16	81/4	21.78
200	,,		-/-	
200	watt, medium receptacle *	19	111/4	28.06
300	),		,	
400	watt, Mogul receptacle	23	141/2	<b>35</b> .98
500	),	_ 3	/8	

\*Mogul receptacle for 19 inch size, \$1.32 additional.

Pull switch concealed in body and wired, \$1.98 additional.

Standard length, 4 feet. Additional lengths, per foot, 66 cents.



Type JB

Type KB
Lighting Fixtures and Accessories

# Type KB BAND, ORNAMENTS, CHAINS AND CANOPY, BRUSH BRASS FINISH

Reflector, White Enameled Steel

	Outside Diameter Inches	Bowl Inches	List Price
40 60 100 watt, medium receptacle	11	6	\$19.80
200 watt, medium receptacle	16	81/4	23.10
200 watt, medium receptacle*	19	111/2	28.36
$\left\{\begin{array}{c} 400 \\ 500 \end{array}\right\}$ watt, Mogul receptacle	23	141/2	18.15

\*Mogul receptacle for 19 inch size, \$1.32 additional.

Pull switch concealed in body and wired, \$1.98 additional.

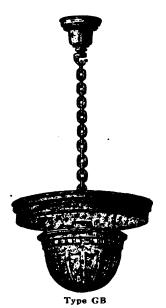
Standard length, 4 feet. Additional lengths, per foot, 66 cents.

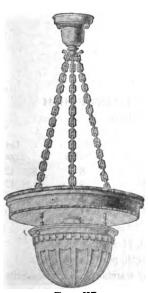
Delivery F. O. B. St. Louis, Mo. For warehouse deliveries write nearest house.

### BRASCOLITES



Type FB





Type HB

# Type FB BAND, BRUSH BRASS FINISH Reflector, White Enameled Steel

	Outside Diameter Inches	Bowl Inches	List Price
$\begin{pmatrix} 40 \\ 60 \\ 100 \end{pmatrix}$ watt, medium receptacle	11	6	\$14.52
$\begin{pmatrix} 100 \\ 200 \end{pmatrix}$ watt, medium receptacle	16	81/4	17.82
200 watt, medium receptacle*	19	111/2	11.72
$\left. egin{array}{l} 400 \\ 500 \end{array} \right\}$ watt, Mogul receptacle	23	141/2	32.34

\*Mogul receptacle for 19 inch size, \$1.32 additional. Pull switch concealed in body and wired, \$1.98 additional.

Type GB

BAND, CHAIN AND CANOPY, BRUSH BRASS FINISH

Reflector, White Enameled Steel

Outside

		Diameter Inches	Bowl Inches	List Price
40 60 100	watt, medium receptacle	11	6	\$19.14
100 200	watt, medium receptacle	16	81/4	22.44
200 300	watt, medium receptacle*	19	111/2	29.70
400 500	watt, Mogul receptacle	23	141/2	38.62

\*Mogul receptacle for 19 inch size, \$1,32 additional.

Pull switch concealed in body and wired, \$1.98 additional.

Standard length, 4 feet. Additional lengths, per foot, 66 cents.

Type HB

BAND CHAINS, AND CANOPY, BRUSH BRASS FINISH

Reflector, White Enameled Steel

		Outside Diameter Inches	Bowl Inches	List Price
40 60 100	watt, medium receptacle	11	6	\$20.46
100 3 200	watt, medium receptacle	16	81/4	23.76
200 300	watt, medium receptacle*	19	111/2	30.04
400 500	watt, Mogul receptacle	23	141/2	38.94

\*Mogul receptacle for 19 inch size, \$1.32 additional.

Pull switch concealed in body and wired, \$1.98 additional.

Standard length, 4 feet. Additional lengths, per foot, 66 cents.

Delivery F. O. B. St. Louis, Mo. For warehouse deliveries write nearest house.

# Western Electric

# **BRASCOLITES**



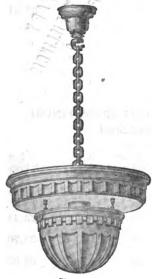
Type AC

BAND AND ORNAMENTS, BRUSH BRASS FINISH

Reflector, White Porcelain

	Outside Diameter Inches	Bowl Inches	List Price
100 watt, medium receptacle	15	81/4	\$18.48
200 watt, medium receptacle	15	81/4	18.48
*200 watt, medium receptacle	181/2	111/2	27.06
*300 watt, medium receptacle	$18\frac{1}{2}$	111/2	27.06

\*Mogul receptacle for 18½ inch size, \$1.32 additional. Pull switch concealed in body and wired, \$1.98 additional. Finishes other than specified will delay shipment.



Type DC

# Type DC CHAIN AND CANOPY, BRUSH BRASS FINISH Reflector, White Porcelain

	Outside Diameter Inches	Bowl Inches	List Price
100 watt, medium receptacle	15	81/4	\$23.10
200 watt, medium receptacle	15	$8\frac{1}{4}$	23.10
*200 watt, medium receptacle	$18\frac{1}{2}$	111/2	33.32
*300 watt, medium receptacle	$18\frac{1}{2}$	111/2	33.32

\*Mogul receptacle for 18½ inch size, \$1.32 additional.

Pull switch concealed in body and wired, \$1.98 additional.

Standard length, 4 feet. Additional lengths, per foot, 66 cents.



Type EC Lighting Fixtures and Accessories

# Type EC CHAINS AND CANOPY, BRUSH BRASS FINISH Reflector, White Porcelain

	Outside Diameter Inches	Bowl Inches	List Price
100 watt, medium receptacle	15	81/4	\$24.42
200 watt, medium receptacle	15	81/4	24.42
*200 watt, medium receptacle	181⁄2	111/2	33.66
*300 watt, medium receptacle	181/2	111/2	33.66

\*Mogul receptacle for 18½ inch size, \$1.32 additional.

Pull switch concealed in body and wired, \$1.98 additional.

Standard length, 4 feet. Additional length, per foot, 66 cents.

Delivery F. O. B. St. Louis, Mo. For warehouse deliveries write nearest house.

List

# BRASCOLITE



Type LC



Type VB





Bankerlite-Indirect Illumination

Type LC				
BODY METAL, BRUSH BRASS FINISH				
Reflector, White Enameled Steel				
Outside				
Diameter Pord				

40.	Size	Diameter Ins.	Bowl Ins.	Price Each
60 100	watt, medium socket	16	81/4	<b>\$25</b> .95
100 200 250	watt, medium socket	19	11½	32.34

# Type JD BODY COMPO, ROSE GOLD FINISH Reflector, White Enameled Steel

Size	Outside Diameter Ins.	Bowl Ins.	Length Ft.	Shpg. Weight Lbs.	List Price Each
400 500 } watt	28	16	5	190	\$118.80
Additional length		<b>\$</b> 1.32.			

Type VB Bracket ALL METAL, BRUSH BRASS FINISH Reflector, White Enameled Steel

Size	Extends Ins.	Bowl Ins.	Shpg. Weight Lbs.	List Price
60 \ 100 \ \ watt	12	$6\frac{1}{4}$	32	\$19.14

Type VA Bracket ALL METAL, BRUSH BRASS FINISH Reflector, White Enameled Steel

100 watt..... 12

Indirect Illumination for Bank Cages, Etc. CAST AND SHEET METAL, STATUARY BRONZE FINISH Reflector, White Enameled Steel

Extends Weight Ins. Length per Ft. Standard lamps, 25, 40 or 60 watt... To Order 8 lbs. 9

Sections over 18 inches, twin pull socket to each 24 inches, wired, complete, except lamps. Price per foot, steel, \$7.92; brass or bronze, \$11.88. Sections 18 inches or shorter with twin pull socket, two lights, wired, complete, except lamps. Price, steel, \$11.88, brass or bronze, \$17.82.

Type RB

BRA	CKET METAL, BAND C				FINISH List		
Reflector, White Enameled Steel Extends Bowl Length							
	Size	Extends Ins.	Bowi Ins.	Length Ins.	Each		
40 60 100	watt	18	7	. 26	\$39.60		
	watt	20	9	26	44.88		

Pull switch concealed in body and wired, \$2.64 additional.

Delivery F. O. B. Factory, St. Louis, Mo. For warehouse deliveries write nearest house.



Type RB

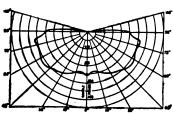
# CUTTER RADIAL STREETHOOD BODIES

# For Street Lighting

A Radial Streethood Body consists of a ventilated iron canopy threaded for 3/4 inch pipe or adapter or for 11/4 inch pipe; a porcelain housing with attachments for either multiple or series sockets and a porcelain enameled radial reflector with or without diffusing glassware. The porcelain housing is made for use with either inner-wired or outer-wired fixtures and is covered with a weatherproof glaze of an attractive color. Wires leading to the socket may be tied securely in the rim of the porcelain thus eliminating the necessity of a crossarm. Where list prices include sockets, Cutter lamp grip multiple sockets or Regent film sockets\* will be supplied.



18 Inch Radial Bowl Streethood Body, Showing use of Simple Crossarm and Locknut for ¼ Inch Gooseneck Suspension



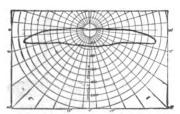
Distribution Curve for 100 C. P. Lamp and 18 Inch Radial Bowl Reflector



20 Inch Flat Radial Streethood Body



18 Inch Concentric Dome Body with Small Refractor



Distribution Curve for 100 C. P. Series Lamp and 18 Inch Concentric Dome Reflector with Refractor

# 18 INCH RADIAL BOWL STREETHOOD BODIES For 60, 80 and 100 C.P., Series and 300 Watt or Smaller Multiple Type C Mazda Lamps

List	List				4.
No. for	No. for			Ship.	List
$\frac{3}{4}$ In.	11/4 In.		Std.	Wt.,	Price
Pipe	Pipe	Description	Pkg.	Lbs.	Each
20001		Medium screw socket		$13\frac{5}{8}$	<b>\$7.98</b>
20003	20004	Mogul screw socket	20	14	8.40
20005	20006	*Regent film socket	20	$14\frac{1}{4}$	9.80
20007	20008	Without socket	20	$12\frac{3}{4}$	7.28

# 20 INCH RADIAL BOWL STREETHOOD BODIES For 60, 80 and 100 C.P. Series and 300 Watt or Smaller Multiple Type C Mazda Lamps

20009	20010	Medium screw socket	20	141/8	\$8.68
20011	20012	Mogul screw socket	20	$15\frac{1}{4}$	9.10
20013	20014	*Regent film socket	20	$15\frac{1}{2}$	10.50
20015	20016	Without socket	20	14	7.98

## 20 INCH FLAT RADIAL STREETHOOD BODIES For Old Style Series and Small Multiple Lamps

20033	20034	Medium screw socket	20	121/8	\$6.93
20035	20036	Mogul screw socket	20	$12\frac{1}{2}$	7.35
				$12\frac{3}{4}$	8.76
20039	20040	Without socket	20	117/8	6.23

#### 18 INCH CONCENTRIC DOME BODIES WITH SMALL HOLO-PHANE REFRACTOR

#### For 60, 80 and 100 C.P. Type C Series Mazda Lamps

22177	22178	Medium screw socket	20	165%	\$12.53
22179	22180	Mogul screw socket	20	17	12.95
		*Regent film socket		$17\frac{1}{4}$	14.35
22183	22184	Without socket	20	$15\frac{3}{4}$	11.84

# 18 INCH CONCENTRIC DOME BODIES WITH SMALL OPAL DIFFUSER

### For 60, 80 and 100 C.P. Type C Series Mazda Lamps

		Medium screw socket		145%	\$9.03
22187	22188	Mogul screw socket	20	15	9.45
22189	22190	*Regent film socket	20	$15\frac{1}{4}$	10.85
22191	22192	Without socket	20	$13\frac{3}{4}$	8.33

## PARTS FOR STREETHOOD BODIES

Shin.

		vp.	
List		Wt.,	Price
No.	Description	Lbs.	Each
20097	¾ in. canopy only	13/4	<b>\$0.49</b>
20098	$1\frac{1}{4}$ in. canopy only	13/4	.49
20099	34 in. canopy only for insulating joint on		
	Style B bracket	13/4	.49
20750	Porcelain housing	617	2.94
21404	18 in. radial bowl reflector	43/4	3.85
21504	20 in. radial bowl reflector	6	4.55
21507	20 in. flat radial reflector	31/8	2.80
22196	18 in. concentric dome reflector with holder.	41/4	4.55
22197	Small Holophane refractor		4.55
22198	Small opal diffuser		1.05
tS	imple crossarm No. 20752 with 3/ inch le	ocknut	may he

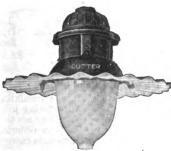
\*Simple crossarm No. 20752 with ¾ inch locknut may be attached to canopy for ¾ inch gooseneck suspension. Add 42 cents to list price.

\*Standard film socket will be furnished in place of Regent when so ordered.

Delivery F. O. B. Factory, South Bend, Ind. For warehouse deliveries write nearest house.



20 Inch Radial Bowl Streethood Body, with Extension



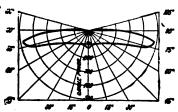
18 Inch Radial Bowl Streethood Body with Large Sol-Lux Diffuser



24 Inch Radial Bowl Streethood Body with Acorn Diffuser



20 Inch Concentric Dome Streethood Body with Large Refractor



Distribution Curve for 250 C.P. Lamp and Inch Radial Bowl Reflector with Large Refractor

Simple crossarm No. 20752 with ¾ inch locknut may be attached to canopy for ¾ inch gooseneck suspension. Add 42 cents to list price.

\*Standard film socket will be furnished in place of Regent when so ordered.

# CUTTER STREETHOOD BODIES Radial and Concentric

For 250, 400 and 600 C.P. Series and Large Multiple Type C Mazda Lamps

Streethood bodies listed on this page are similar to those listed on the previous page, but the reflectors are designed for larger lamps. The 20 inch radial bowl reflector with extension is used without refractor or diffuser. Other reflectors shown on this page are equipped with hinged holders and are listed with large Holophane refractor or Sol-Lux diffuser. Where list prices include sockets, Cutter lamp grip multiple sockets or Regent film series sockets will be supplied.\*

#### 20 INCH RADIAL BOWL STREETHOOD BODIES WITH **EXTENSION**

For 250, 400 and 600 C.P. Series and 400 Watt or Larger Multiple Type C Mazda Lamps

List	List			Ship.	
No. for	No. for			W.t.,	List
3/4 In.	11/4 In.		Std.	Lbs.	Price
Pipe	Pipe	Description .	Pkg.	Each	Each
20017	20018	Medium screw socket	20	$15\frac{7}{8}$	\$9.38
20019	20020	Mogul screw socket	20	161/4	9.80
20021	20022	*Regent film socket	20	161/2	11.20
20023	20024	Without socket	20	15	8.68
10 IN	CH DA	DIAL BOWL BODIES WI	TU I	ADCE	HOLO.

# PHANE REFRACTOR

		00 and 600 C.P. Type C Serie			mps
20049	20050	Medium screw socket	20	$21\frac{1}{2}$	<b>\$</b> 19.53
20051	20052	Mogul screw socket	20	$21\frac{3}{4}$	19.95
		*Regent film socket	20	22	21.35
20055	<b>2</b> 0056	Without socket	20	21	18.83

#### 18 INCH RADIAL BOWL BODIES WITH LARGE SOL-LUX DIFFUSER

For 250, 400 and 600 C.P. Type C Series Mazda Lamps 22199 22200 Medium screw socket..... 20 \$11.83 171/2 22202 Mogul screw socket..... 173/4 22201 12.25 22204 \*Regent film socket...... 22203 13.6520 18 22206 Without socket..... 2220520 17 11.13

# 24 INCH RADIAL BOWL STREETHOOD BODIES WITH ACORN DIFFUSER

For 250, 400 and 600 C.P. Series and 400, 500, 750 and 1000 Watt Multiple Type C Mazda Lamps

20025	20026	Medium screw socket		26 1/8	\$15.68
		Mogul screw socket		271%	16.10
		*Regent film socket		$27\frac{1}{2}$	17.50
		Without socket		$\frac{2772}{26}$	14.98
					14.95
11	Acorn (	diffuser is not wanted, deduct \$4	.00	ust.	

#### 20 INCH CONCENTRIC DOME BODIES WITH LARGE HOLO-PHANE REFRACTOR

For 250, 400 and 600 C.P. Type C Series Mazda Lamps						
22207	22208	Medium screw socket	20	$21\frac{5}{8}$	<b>\$</b> 19.18	
22209	22210	Mogul screw socket	20	22	19.53	
		*Regent film socket		$22\frac{1}{4}$	21.00	
22213	22214	Without socket	20	2034	18.48	

#### 20 INCH CONCENTRIC DOME BODIES WITH LARGE SOL-LUX DIFFUSER

	LUX DIFFUSER		
Fo	r 250, 400 and 600 C.P. Type C Series Maz	da La	mps
22215	22216 Medium screw socket 20	$17\frac{5}{8}$	\$11.48
22217	22218 Mogul screw socket 20	18	11.90
22219	22220 *Regent film socket 20	$18\frac{1}{4}$	13.30
22221	22222 Without socket 20	$16\frac{3}{4}$	10.78
	PARTS FOR STREETHOOD BODI	ES	
20097	20098 Canopy only	134	\$0.49
20750	Porcelain housing	$6\frac{1}{4}$	2.94
21502	18 in. radial bowl with holder	734	5.60
21505	20 in. radial bowl with extension	7	5.25
22225	24 in. radial bowl with holder	9	8.05
21503	20 in. concentric dome with holder	$7\frac{1}{2}$	5.25
22223	Large Holophane refractor	$5\frac{1}{4}$	9.80
22224	Large Sol-Lux diffuser	$1\frac{1}{4}$	2.10
		2 1	•

Delivery F. O. B. Factory, South Bend, Ind. For warehouse deliveries write nearest house.



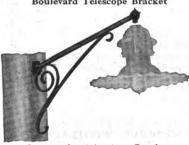
Style A Bracket



Majestic Bracket



**Boulevard Telescope Bracket** 



Spartan Straight Arm Bracket



Arcadian Bracket



Imperial Bracket Street Lighting Appliances

# CUTTER INCANDESCENT BRACKETS

# For Street Hood Bodies

Brackets listed on this page are designed for streethood bodies listed on preceding pages. Prices cover brackets only. The list price of a complete fixture is obtained by adding to the price of the bracket, the price of the streethood body selected.

#### STYLE A BRACKET

Style A bracket consists of 4 foot gooseneck of ¾ inch pipe No. 21443 and grooved pole plate No. 21438 which allows inner wiring when desired. Brace arm on back of pole guides the line wires to the streethood body, where they may be fastened in holes in the rim of the porcelain housing or to crossarm No. 20752.

			Ship.	List
List		Std.	Wt., Lbs.	Price
No.	Description	Pkg.	Each	Each
21521	With brace arm	20	10	\$2.59
21522	Without brace arm	20 -	7	1.82

#### STYLE B BRACKETS

Similar to Style A, with a Cutter High Voltage Insulating Joint to separate gooseneck and canopy. This insulating joint allows inner wiring. When outside wires are used, they are tied in holes in the rim of the porcelain housing. When ordering streethood bodies for Style B brackets, specify three-hole canopy No. 20099.

21523	With brace arm	20	13	\$3.64
21524	Without brace arm	20	10	2.87

#### **MAJESTIC BRACKETS**

Made of 1¼ inch pipe with flat iron scroll and fancy grooved pole plate. Holds the lamp 4 feet from the pole. Scroll will be made of channel iron instead of flat iron when so ordered, at \$1.20 list additional.

#### **BOULEVARD TELESCOPE BRACKETS**

The ¾ inch pipe telescopes into the 1¼ inch pipe, allowing adjustments of 5 to 7 feet. A heavy three-hole pole plate with crossarm and porcelain elbow makes the bracket easy to put up and wire, serving also as a protection for the wires. The knurled set screw in the pipe and the pole step in the lower corner of the scroll are for the convenience of the lineman when renewing lamps.

21526 With pony glassinsulators..... 20 33 \$6.58

### SPARTAN STRAIGHT ARM BRACKETS

Consists of grooved pole plate, 4 foot arm of 1½ inch pipe, fancy headpiece and artistic flat iron scroll. Channel iron scroll, \$1.20 list extra.

21527 . With 11/4 inch nipple...... 20 24 \$4.55

#### ARCADIAN BRACKETS

A substantial 3 foot fixture made of 1½ inch (bore) pipe with three-hole pole plate, insulators, porcelain elbow (to prevent abrasion of wires) wrought iron scroll and cast iron headpiece.

21528 With 11/4 inch nipple...... 20 17

#### ARCADIAN JUNIOR BRACKETS

Similar to Arcadian, with 20 inch extension and pole plate used on Spartan Straight Arm Bracket.

21529 With 1¼ inch nipple...... 20 14 \$3.15

#### **IMPERIAL BRACKETS**

A 4 foot arm of 1½ inch pipe with a quarter bend is threaded on the outer end for supporting streethood bodies with 1½ inch canopies. A channel iron scroll will be furnished in place of flat iron for \$1.30 list additional.

21530 With grooved pole plate...... 20 20 \$4.20

Delivery F. O. B. Factory, South Bend, Ind. For ware-house deliveries write nearest house.

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# **CUTTER CENTER SUSPENSION STREETHOODS**



Style E with 18 Inch Radial Bowl Reflector



Style EX with 18 Inch Radial Bowl Reflector and Simple Crossarm



Style E with 18 Inch Radial Bowl Reflector and Sol-Lux Diffuser



Style EX with 18 Inch Concentric Dome Reflector and Small Refractor

# Style E Insulated Loop Suspension

Consists of Style D, with a Cutter high voltage insulator between the arc ring and adapter. Recommended for circuits of over 2300 volts

10100.	WITH 10 INCH DADIN DOWN	-		
	WITH 18 INCH RADIAL BOWL	KEFL		
List		Std.	Wt., Lbs.	List Price
No.	Description	Pkg.	Each	Each
		_		
21571	Medium screw socket	20	$16\frac{1}{2}$	\$8.33
21572	Mogul screw socket	20	17	8.75
21573	*Regent film socket	20	171/4	10.15
WITH		ARGE	REFR	ACTOR
21574	Medium screw socket	20	$24\frac{1}{2}$	\$19.88
21575	Mogul screw socket	20	25	20.30
21576	*Regent film socket	20	$25\frac{1}{4}$	21.70
WITH	18 INCH RADIAL BOWL AND S	OL-LU	X DIF	FUSER
21568	Medium screw socket	20	201/2	\$12.18
21569	Mogul screw socket	20	21	12.60
21570	*Regent film socket	20	211/4	14.00
	WITH 20 INCH RADIAL BOWL	REFL		· ·
21580	Medium screw socket	20	173/4	\$9.03
21581	Mogul screw socket	20	1814	9.45
21582	*Regent film socket	20	181/2	10.85
·wi	TH 20 INCH RADIAL BOWL, WI			
21583	Medium screw socket	20	183/4	<b>\$</b> 9.74
21584	Mogul screw socket	20	1914	10.15
21587	*Regent film socket	20	191/2	11.55
	WITH 24 INCH RADIAL BOWL	REFL		2
21588	Medium screw socket	20	203/4	<b>\$</b> 10.78
21589	Mogul screw socket	20	2114	11.20
21590	*Regent film socket	20	$21\frac{1}{2}$	12.60
WITH				
21591	Medium screw socket	20	293/4	\$16.03
21592	Mogul screw socket	20	3014	16.45
21593	*Regent film socket	20	301/2	17.85
w	ITH 20 INCH FLAT RADIAL WA	VE RE		
21594	Medium screw socket	20	151/4	\$7.28
21595	Mogul screw socket	20	161/2	7.50
21596	*Regent film socket	20	1634	9.10
WITH		REFI		R AND
*****	SMALL HOLOPHANE REF	RACTO		
21601	Medium screw socket	20	191/2	\$12.88
21602	Mogul screw socket	20	20	13.30
21603	*Regent film socket	20	201/4	14.70
WITH	<u> </u>	REFI	ECTO	R AND
******	LARGE HOLOPHANE REF			
21607	Medium screw socket	20	241/2	\$19.53
21608	Mogul screw socket	20	25	19.95
21609	*Regent film socket	20	$25\frac{1}{4}$	21.35
WITH	20 INCH CONCENTRIC DOME	REFI	ECTO	R AND
	LARGE SOL-LUX DIFFU			
21613	Medium screw socket	20	$20\frac{1}{4}$	\$11.83
21614	Mogul screw socket	20	2034	12.25
21615	*Regent film socket	20	21	13.65
	STYLE EX-INSULATED LOOP	SUSPE	NSIO	V
Co	nsists of Style E with simple crossarm			In order-
ing, use	e List Nos. for Style E fixtures with	prefix '	EX."	Add 35

Consists of Style E with simple crossarm No. 20751. In ordering, use List Nos. for Style E fixtures with prefix "EX." Add 35 cents to list prices and 1½ lbs. to shipping weights.

#### SUSPENSION PARTS

20751	Simple crossarm	11/2	<b>\$0.35</b>
20753	$\frac{3}{4}$ x $\frac{7}{16}$ in. adapter	1/2	.21
20754	Arc ring with $\frac{1}{16}$ in. stud	1/4	. 14
20755	H. V. insulator with $\frac{7}{16}$ in. studs	$2\frac{1}{4}$	1.26

\*Standard film socket furnished in place of Regent when so  $\cdot$  ordered.

Delivery F. O. B. Factory, South Bend, Ind. For warehouse deliveries.

# **CUTTER CENTER SUSPENSION STREETHOODS** Style F-Cable Grip Suspension



Style F 18 inch Radial Bowl Reflector

Consists of a streethood body with 3/4 inch adapter and cable clamp. This clamp permits the cable to enter at one point on one side and at a higher or lower point on the other side so the fixture can be made level irrespective of the varying heights of cable attachments.

With this style of fixture, no crossarm is used. The line wires are looped into holes in the rim of the porcelain and tied securely in

place. Recommended for circuits of not more than 2300 volts.

#### WITH 18 INCH RADIAL BOWL REFLECTOR

				Wt.,	List
	List		Std.	Lbs.	Price
	No.		Pkg.	Each	Each
	21843	Medium screw socket	20	$16\frac{1}{4}$	<b>\$</b> 8.89
•	21844	Mogul screw socket	20	$16\frac{3}{4}$	9.31
	21845	*Regent film socket	20	17	10.71
	WITH		D L	ARGE REFRA	CTOR
	<b>2</b> 1846	Medium screw socket	20		<b>\$</b> 20.44
	21847	Mogul screw socket	20	$24\frac{3}{4}$	20.86
	<b>2</b> 1848	*Regent film socket	20	25	22.26
	WITH		D SC	L-LUX DIFF	USER
	21616	Medium screw socket	20		<b>\$</b> 12.74
	21617	Mogul screw socket	20	2034	13.16
	21618	*Regent film socket	20	21	14.56
		WITH 20 INCH-RADIAL BOY	WL I	REFLECTOR	
	21852	Medium screw socket	20	$17\frac{1}{2}$	<b>\$</b> 9.59
	21853	Mogul screw socket	20	$17\frac{3}{4}$	10.01
	21854	*Regent film socket	20	18	11.41
	WIT	TH 20 INCH RADIAL BOWL,	WIT	H EXTENSIO	N
	21855	Medium screw socket	20	$18\frac{1}{2}$	<b>\$</b> 10.29
	21856	Mogul screw socket	20	19	10.71
	21857	*Regent film socket	20	191/4	12.11
		WITH 24 INCH RADIAL BO	WL :	REFLECTOR	
	21858	Medium screw socket	20	$20\frac{1}{2}$	\$11.34
	21859	Mogul screw socket	20	21	11.76
	21862	*Regent film socket	20	211/4	13.16
	WITH	24 INCH RADIAL BOWL A	ND .	ACORN DIFF	USER
	21863	Medium screw socket	20		<b>\$</b> 16.59
	21864	Mogul screw socket	20	30	16.92
	21865	*Regent film socket	20	$30\frac{1}{4}$	18.41
	W	ITH 20 INCH FLAT RADIAL	WAV	E REFLECTO	R
	21866	Medium screw socket	20	15	\$7.84
	21867	Mogul screw socket	20	$15\frac{1}{2}$	8.26
	21868	*Regent film socket	20	$15\frac{3}{4}$	9.66
	WITH	18 INCH CONCENTRIC DO	ME	REFLECTOR	AND
		SMALL HOLOPHANE R	EFR.	ACTOR	
	21619	Medium screw socket	20		<b>\$</b> 13.44
	21620	Mogul screw socket	20	1934	13.86
	21621	*Regent film socket	20	· <b>20</b>	15.26
	WITH	20 INCH CONCENTRIC DO	ME	REFLECTOR	AND
	•	LARGE HOLOPHANE R	EFR.		
	21622	Medium screw socket	20		<b>\$20.05</b>
	21623	Mogul screw socket	20	$24\frac{3}{4}$	<b>20</b> .51
	<b>2</b> 1624	*Regent film socket	20	25	21.91
	WITH	20 INCH CONCENTRIC DO	ME	REFLECTOR	AND
		LARGE SOL-LUX DI		SER	
	21763	Medium screw socket	20	201/4	<b>\$</b> 12.39
	21764	Mogul screw socket	20	20 3/4	12.81
	21765	*Regent film socket	20	21	14.21
		STYLE FX—CABLE GRIP	SUS	PENSION	



Style FX with 18 inch Radial Bowl Reflector and Large Refractor

Style F with 24 inch Radial Bowl Reflector and Acorn Diffuser



Style FX with 20 inch Concentric Dome Reflector and Large Refractor Street Lighting Appliances

\$0.56 Cable grip clamp..... \*Standard film socket furnished in place of Regent when so

Add 56 cents

Delivery F.O. B. Factory, South Bend, Ind. For warehouse deliveries write nearest house.

SUSPENSION PARTS

Consists of Style F with a cable crossarm No. 20756. ing use List Nos. of Style F fixtures with prefix "FX." to list and 2 lbs. to shipping weights.

20756

## **CUTTER INVERTED CONE STREETHOOD BODIES**

# For Street Lighting

Inverted Cone Streethood Bodies are made in two sizes with 18 and 22 inch hoods, respectively. The same reflector is used with both. The reflector shape, which resembles the frustrum of an inverted cone, is designed to throw the reflected rays out at a distance where they are needed to help the direct rays of the lamp. The hood overlaps the reflector so that most of the light passing above the horizontal is redirected into useful planes. Distribution curves show that the 18 inch size gives splendid results with 60, 80 and 100 candle power series lamps and small multiple lamps. The 22 inch size gives higher efficiency with the same lamps and is always recommended for 100 and 250 candle power series lamps.

An inverted cone body consists of a hood top, reflector, hood fork with 34 inch rigid male nipple and with or without socket, according to list.

The hoods and reflectors are made of special deep drawing steel and finished in either high-grade weatherresisting baked paint enamel or porcelain enamel.

The hood fork has a flange near the top which fits directly beneath the upper portion of the hood. The 1/2 inch nipple is made a rigid part of the flange, projecting above it for connection to the crossarm of outerwired brackets or to the hood flange which is screwed on the outer end of inner-wired brackets.



18 Inch Inverted Cone Streethood Body

# **CUTTER INVERTED CONE STREETHOOD BODIES**

# With 18 Inch Hood—Paint Enamel Finish

			Weight,	List
List		Std.	Lbs.	Price
No.	Description	Pkg.	Each	Each
21682	Medium screw socket	20	$5\frac{1}{2}$	\$2.66
21683	Mogul Screw Socket	20	53/4	3.08
21684	*Regent Film Socket	20	6	4.48
21685	Without socket	20	43/4	1.96



23 Inch Inverted Cone Streethood Body

With 18 Inch Hood-Porcelain Enamel Finish

21686	Medium screw socket	20	63/4	\$4.76
21687	Mogul Screw Socket	20	7	5.18
21688	*Regent Film Socket	20	71/4	6.58
21689	Without socket	20	$\frac{714}{612}$	4.06

#### With 22 Inch Hood—Paint Enamel Finish

21691 21692	Medium screw socket Mogul Screw Socket *Regent Film Socket Without socket	20 20	7¾ 8 8¼ 7	\$3.50 3.92 5.32 2.80
21000	Without booker	20	•	2.00



22 Inch Hood, Reflector and Regent Film Socket with Hood Fork and ¾ Inch Rigid Nipple

# With 22 Inch Hood—Porcelain Enamel Finish

21694	Medium screw socket	20	93/4	\$5.88
21695	Mogul Screw Socket	20	10	6.30
21696	*Regent Film Socket	20	101/4	7.70
21697	Without socket	20	9	5.18

#### EXTRA PARTS AND SPECIAL FINISHES

-1.5	21517 Hood flange for 1/2 in. pipe, 3/4 in. nipple.		1/2	\$0.21
	21718 Hood flange for ¾ in. pipe, ¾ in. nipple.		1/2	.21
	21698 18 in. hood, paint enameled	20	25/8	.84
1 1054	21699 18 in. hood, porcelain enameled	20	3	2.10
	21705 18 in. hood, galvanized and painted	20	25/8	1.40
80	21706 18 in. hood, copper	20	3	4.20
- 4	21707 22 in. hood, paint enameled	20	43/4	1.68
	21708 22 in. hood, porcelain enameled	20	61/4	3.22
- XX	21709 22 in. hood, galvanized and painted	20	43/4	2.31
007	21710 Reflector, paint enameled	20	21/8	.84
00	21711 Reflector, porcelain enameled	20	21/8	1.68
100	21712 Reflector, nickeled copper	20	25/8	4.90
0 15. 30.	21713 Hood fork, ¾ in. rigid nipple	20	*	. <b>2</b> 8

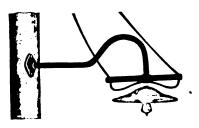
Distribution Curve for 80 C. P. \*See description of Regent Film Socket. Standard Film Sockets Lamp and 18 Inch Inverted will be furnished when so ordered. Cone Streethood Body

Delivery F. O. B. Factory, South Bend, Ind. For warehouse deliveries write nearest house.

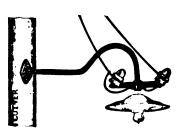
# **CUTTER INCANDESCENT BRACKETS**

### For Streethood Bodies

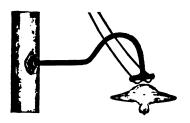
Brackets listed on this page are designed for use with Inverted Cone Streethood Bodies shown on preceding page. Prices include crossarms which are threaded underneath for ¾ inch nipple. Hood forks furnished with sockets for 18 and 22 inch Inverted Cone Streethood Bodies have rigid ¾ inch nipples. The flanged portion of the hood fork fits the lower surface of the hood top, clamping it securely to the crossarm. Prices do not include hoods, reflectors or sockets. Order Inverted Cone Streethood Bodies separately as listed on preceding page.



Standard Bracket



Iron Arm Bracket



Urban Bracket





Majestic Junior Bracket

## STANDARD BRACKETS

Has a 3 foot gooseneck of 1/2 inch pipe, pole plate and enameled wood crossarm with metal bound ends (to prevent The brace arm shown on the back of the pole is used to guide the line wires to the crossarm. This method of wiring holds the fixture steady in stormy weather.

			Wt.,	List
List		Std.	Lbs.	Price
No.	Description	Pkg.	Each	Each
21923	With brace arm	<b>2</b> 0	10	\$2.45
21924	Without brace arm	20	7	1.68

#### RAILWAY BRACKETS

Similar to the Standard Bracket, with a clamp for iron pipe in place of the pole plate. Prices below do not include brace arm. 21925 For 2½ in. (bore) pipe..... \$1.89 9  $\frac{2.03}{2.31}$ 20 20 10 2.59

#### IRON ARM BRACKETS

20

20

10

13

2.10

3.43

Similar to the Standard Bracket, with an iron crossarm supporting glass insulators. Prices do not include streethood bodies. 21931 With brace arm..... \$2.87 13

#### EASTERN BRACKETS

21932 Without brace arm.....

21934 Without brace arm.....

Consists of the Iron Arm Bracket with a Cutter High Voltage Insulator between the gooseneck and iron crossarm. Prices do not include streethood bodies. 21933 With brace arm..... 16 \$4.13

# **URBAN BRACKETS**

The spreader on the end of the gooseneck has a fiber insulator to separate it from the streethood proper, thus reducing the risk of leakage on circuits up to 600 volts. Furnished with 3 foot gooseneck of 1/2 inch pipe. Prices do not include streethood bodies.

21935	With brace arm	20	11	<b>\$</b> 3.15
21936	Without brace arm	20	8	2.38

# INNER-WIRED BRACKETS

Consists of a 3 foot gooseneck of 1/2 inch pipe, 1/2 inch by 34 inch hood flange, and grooved pole plate.

			Wt.,	List
List		Std.	Lbs.	Price
No	Description •	Pkg.	Each	Each
21941	With brace arm	20	81/2	\$2.10
21942	Without brace arm		51/2	1.33

### MAJESTIC JUNIOR BRACKETS

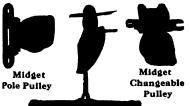
A highly artistic fixture built on the same lines as Majestic Bracket (Trade No. 21525), but smaller, having a reach of 3 feet from pole to lamp and with the arm made of ½ inch pipe. Designed for either inner or outer wiring.\* With hood flange..... 21943 151/4 \$3.85 21944\* Without hood flange..... 20 15 3.64

Delivery F. O. B. Factory, South Bend, Ind. For warehouse deliveries write nearest house.

\$8.26

# **CUTTER CENTER SUSPENSION STREETHOODS**

# With Inverted Cone Streethood Bodies



Petite Pulley with Crossarm for Swinging Streethoods

#### SWINGING STREETHOODS

Consists of a Cutter Inverted Cone Streethood Body supported by a Petite Lamp-supporting Pulley. A Midget Pole Pulley guides the hoisting rope to the bottom of the pole. The Midget Changeable Pulley may be used either as a pole pulley or clamped to cable near the pole. Order pulleys and Inverted Cone Streethood Bodies separately.

List	ou Doules separately.	#Std.	Wgt. Lb	s. List
No.	Description	Pkg.		Price Each
20413	Petite Pulley with crossarm	50	614	\$2.10
20414	Midget Pole Pulley	100	217 213	.84
20415	Midget Changeable Pulley	100	233	.98

#### LOOPED HOODS

Consists of an Inverted Cone Streethood Body with looped crossarm.

Looped Hood

	Wit	h 18 Inch Hood	, Paint	Enameled	1	
List No.	List Price Each	List No.	List Price Each	List No.	Approx. Wt. Lbs. Each	List Price Each
Medium Sci	rew Sock	et Mogul Scre	w Socke	t *Regent	Film Se	cket
21951	\$3.36	21952	\$3.78	21953	9	\$5.18
	With	18 Inch Hood, I	Porcelai	n Enameled		
21954	\$5.46	21955	\$5.88	21956	101/4	\$7.28
	Wit	h 22 Inch Hood	, Paint	Enameled		
21957	\$4.20	21958	\$4.62	21959	111/	\$6.02
	With 2	22 Inch Hood, I	Porcelai	n Enameled		
		21961 uantity, 20 of on			131/4	\$8.40

#### Cable Grip Suspension Streethoods

A center span fixture with a crossarm, insulator and cable clamp supporting Inverted Cone Streethood Bodies.



Cable Grip Suspension Streethood

With	18	Inch	Hood.	Paint	Enameled
			,	,	

21963	\$5.60	21964	\$6.02	21965	141/	\$7.42
	With	18 Inch Hood, I	Porcelai	n Enameled		
21066	\$7.70	21967	\$8.12	21968	158/	\$0.52

With 22 Inch Hood, Paint Enameled
21969...... \$6,44 21970...... \$6.86 21971..... 17

With 22 Inch Hood, Porcelain Enameled

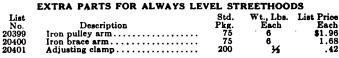
21972..... \$8.82 21973...... \$9.24 21974...... 19 \$10.64 Standard package quantity, 20 of one style or List No.



The two wires leading from the brace arm to the hood make up one side of the suspension, while cords passing over covered pulleys form the other side. Adjusting clamps at the end of each cord are independently drawn up taut and locked together. These parts, together with the Center Hoods listed below, constitute Always Level Streethoods.



Center Hood used with Always Level Streethoods



#### CENTER HOODS

The center part only of the Cutter Always Level Streethood described above. It consists of a spreader tip crossarm and an Inverted Cone Streethood Body.

With 18 Inch Hood, Paint Enameled

Madina Saram Sachet Magui Saram Sachet



Iron Brace Arm for Always Level Streethood

Adjusting Clamp

1	
*	

Always Level Streethood Assembled Complete

Medium 2ciem 20cker, Model 2ciem 20cker			. wasaur Lum Docker			
List No. 21975	List Price Each \$3.92	List No. 21976	List Price Each \$4.34	List No. 21977	Approx Wt. Lbs. Each 111/2	List Price Each \$5.74
	Wish	18 Inch Hood.	Porcelai	in Enameled		
21978	<b>\$</b> 6.02	21979	\$6.44	21980	13	\$7.84
	Wit	h 22 Inch Hood	, Paint	Enameled		
21981	\$4.76	21982	\$5.18	21983	14	<b>\$6.5</b> 8
	With	22 Inch Hood.	Porcelai	n Enameled		
21984	\$7.14	21985	\$7.56	21986	17	\$8.96
0444				or Liet No		

Standard package quantity, 20 of one style or List No.

\*Standard Film Sockets furnished in place of Regent when so ordered.

†Extra parts ordered to make complete fixtures, take same discounts as complete fixtures.

Delivery F. O. B. Factory, South Bend, Ind. For warehouse deliveries write nearest house.

\*Parent Film Socket

# CUTTER REGENT FILM SOCKETS

# For Street Series Systems

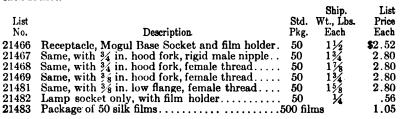
The film cutout used in the Regent Film Socket punctures uniformly and accurately at rated voltage. It is enclosed in the socket and protected against climatic conditions. It cannot creep or fall out as a result of the vibration of the fixture and lamp in service.

The film holder is so designed that it is impossible to use any substitute in place of the regular film. Wood splinters, paper, etc., cannot be used. Films are easily renewed.

On account of wind action and changing climatic conditions, the spring clips commonly used to support the socket and lamp deteriorate and allow the lamp to fall out. There are no spring clips used in the Regent Socket.

The two screw shells and the center post form a combination that grips the lamp base and holds it securely in position, greatly reducing lamp breakage during inclement weather.

Porcelain housings furnished with streethood bodies listed without socket are supplied with screws and nuts for supporting Regent Film Socket No. 21466. This socket is listed also with hood fork and ¾ inch rigid male nipple for making combination fixtures of the inverted cone type, and with other fittings for mounting in old style fixtures previously installed. Three films furnished free with each socket.



#### LAMP GRIP MULTIPLE SOCKETS

Cutter Lamp Grip Sockets are designed to meet the severe conditions found in outside service. The intense heat of the Type C lamps subjects the socket to greatly varying temperatures, ranging from several hundred degrees Fahrenheit when the lamp is burning, to below zero when the lamp is out.

These changes in temperature, taking place while the socket shells are under tension, will quickly depreciate their spring qualities and cause them to split, unless they are made sufficiently strong and some provision provided to meet these conditions.

The Cutter Lamp Grip Sockets are equipped with two vertical springs which engage the threads of the lamp collar, reënforce the socket shells and relieve the tension. These vertical springs grip the lamp base and prevent the lamp from working loose when subjected to vibration and the contraction and expansion caused by the variations in temperature.

These springs also create an increase of positive contact between the lamp terminal and the socket.

The terminals are easily accessible and very generously designed.

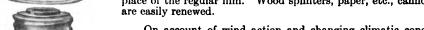
The use of these sockets will greatly reduce lamp breakage and outages.



## HOOD FORKS AND FLANGES

With screws and nuts for fastening sockets in Cutter Inverted Cone Street-hood Bodies.

	Hood fork with 3/4 in. rigid male nipple		3/8	\$0.28
21484	Hood fork with 3/4 in. female thread	100	1/2	.28
	Hood fork with 3/8 in. female thread		1/2	.28
21486	Low flange with 3/8 in. female thread	100 "	<b>*4</b>	.28





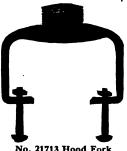
Regent Receptacle and Mogul Base Socket with Film Holder



Regent Film Socket No. 21467 Complete



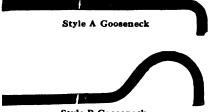
Medium Screw Base Lamp Grip Socket

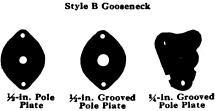


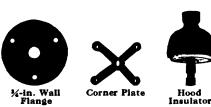
No. 21713 Hood Fork Complete

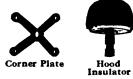
Delivery F. O. B. Factory, South Bend, Ind. For warehouse deliveries write nearest house.

#### **CUTTER BRACKETS** Piece Parts





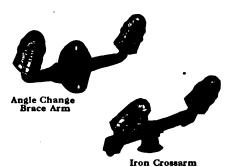


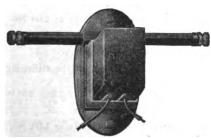






Standard Brace Arm





Shunt Box

GOOSENECKS								
List	List		Size		Wt.	List		
No.	No.	Length	of	Std.	Lbs.	Price		
Style	Style	Feet	Pipe	Pkg.	Each	Each		
À	. В		Inches	•				
2136 <b>2</b>	21365	3	1/2	200	21/8	\$0.70		
21363	21366	4	33	150	3 1/8	.91		
21364	21367	5	33	125	4 7/8	1.12		
21439	21442	3	3/2	150	334	1.05		
21440	21443	4	₹ <u>/</u>	125	4 3/4	1.26		
21441	21444	Ē.	<b>8</b> 2	100	5.87	1 62		

	CURVED POLE PLATI	ES		
List No. 20512 21487 21438	Description For ½ inch pipe Grooved, for ½ inch pipe Grooved, for ½ inch pipe	Std. Pkg. 500 400 400	Wt., Lbs. Each 1 114 214	List Price Each \$0.28 .42 .56
	WALL FLANGES			
21488 21489 21490 21491	Threaded for ½ inch pipe	500 500 400 400	1 1 2 2	\$0.28 .42 .42 .56
	CORNER PLATES			
21492 21493	For ½ inch pipe For ¾ inch pipe	300 200	21/2 21/2	\$0.98 .98
	HOOD INSULATOR	e .		

HOOD INSULATORS							
With pipe cap above, ½ inch stud bel	ow.	Used	on high				
voltage and Eastern brackets.			_				
21494 With 1/2 inch pipe cap	100	3	\$1.26				
21495 With ¾ inch pipe cap	100	3	1.26				

#### STANDARD CROSSARMS

An enameled wood crossarm with metal bound ends (to prevent splitting) and with the fittings bolted to the arm. This arm is used on the Cutter Standard and high voltage brackets.

21496 With 1/3 inch pipe fitting (female thread) above and 3/4 inch wireable waste nut below... \$0.70

#### STANDARD BRACE ARMS

An enameled and metal bound wood arm for guiding the wires to streethoods. 20507 With curved pole plate..... \$0:77

#### IRON CROSSARMS

Used on the Cutter iron arm and Eastern brackets. in the top for ½ inch pipe. Has a wireway underneath threaded for ¾ inch nipple. 

#### ANGLE CHANGE BRACE ARMS

Made of cast iron with curved pole plate and fixed pins. May be used on front or back of pole. 

#### SHUNT BOXES Pole Type, with Brace Arm

Has a reactance coil mounted in a weatherproof case insulated from the pole plate. The coil is for connecting in parallel with the Mogul multiple socket in the streethood and is designed to maintain constant current in a circuit without a regulator. Prices below are for 60 cycle coils. Prices for 25 cycle coils will be furnished on application.

Lis <b>t</b> No.	Lis <b>t</b> No.	C. P.	8td.	Wt., Lbs.	List Price
3.5 or 4	6.6	Lamp	Pkg.	Each	Each
Amps.	Amps.	-			
20495	20501	32	15	10	<b>\$7</b> .91
20496	20502	40	15	. 11	8.12
20497	20503	60	15	12	8.33
20498	20504	80	15	13	8.68
20499	20505	100	15	14	9.10
20500	20506	200	15	16	13.16

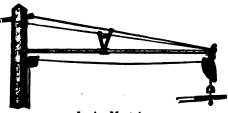
An assortment of Cutter streethood and bracket parts amounting to \$210.00 or over constitutes a standard package.

Delivery F. O. B. Factory, South Bend, Ind. For warehouse deliveries write nearest house.

#### **CUTTER MAST ARMS**

Standard Package Quantity, 15 of One Style or List No.





## Junior Mast Arm

with Triple Insulation Arm

#### WIND-BRACED MAST ARMS

The only side mast arms having braces to prevent the arm from rocking on the pole. They have two strain rods run over a wrought iron truss at the pole and through the eyes of a stiffening triangle.

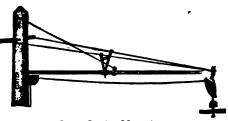
The base of the wrought iron truss has an extension brace which is bolted to the pole, while a similar brace (clamped to the piping) is bolted to the other side of the pole. These braces anchor the pipe firmly, and keep the fixture from swaying sideways in the wind.

The mast arm proper can be partly assembled on the ground. The pole plate has a weatherproof pulley fastened to it, and the lamp-supporting pulley at the outer end makes this mast arm unusually complete.

Wish Clama Kash Oalis

with Clamp Knob Uniy				with Trible II	18UIATI	on Arm
Over- hang Feet	List No.	Wt., Lbs. Each	List Price Each	List No.	Wt., Lbs. Each	List Price Each
8: 10 12	20586 20587 20588	79 86 93	\$22.20 23.70 26.63	20594 20595 20596	83 90 97	\$24.23 25.73 28.65
14 15 16	20589 20590 20591	103 113 123	28.13 28.88 29.63	20597 20598 20599	106 116 126	30.23 30.90 31.65
18 20	20592 20593		31.13 32.63	20600	136 146	33.15 34.65

Standard Package Quantity, 15 of One Style or List No.



Long Junior Mast Arm with Triple Insulation Arm

#### JUNIOR MAST ARMS

Designed to meet the demand for low priced, yet complete and well braced mast arms. They have pole plates with weatherproof pulleys fitted direct to them and mast arm pulleys for lowering the lamps. Shipped complete with strain rods, strain arm, pipe and pulleys.

6	20618	48	\$11.55	20623	51	\$13.58
8	20619	57	12.75	20624	60	14.78
10	20620	60	13.95	20625	63	15.98
12	20621	67	15.15	20626	70	17.18
14	20622	72	16.28	20627	75	18.30

Standard Package Quantity, 15 of One Style or List No.



Long Junior Mast Arm with Cutout Pulley

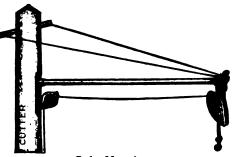
#### LONG JUNIOR MAST ARMS

Similar to the Junior, but with double-braced strain arm. An extra support for the center of the pipe is furnished on 14 foot and longer arms.

Furnished with cutout pulley in place of lamp-supporting pulley with clamp knob, for \$10.86 list additional.

6	20628	52	\$13.18	20637	55	\$14.78
8	20629	61	14.42	20638	64	15.98
10	20630	64	15.58	20639		17.10
12	20631	70	16.82	20640	73	18.30
14	20632	79	18.68	20641	83	20.10
15	20633	85	19.30	20642	89	20.70
16	20634	90	19.92	20643	93	21.30
18	20635	94	20.70	20644	98	22.73
20	20636	100	22.20	20645	104	<b>24</b> . 23

Standard Package Quantity, 15 of One Style or List No.



Cadet Mast Arm

#### CADET MAST ARMS

Similar to Junior mast arms, but without the stiffening triangle.

<b></b>	20698	35		20701	39	\$10.88
	20699	40		20702	44	12.08
<b></b> .	20700	49	11.25	20703	53	13.28

Standard Package Quantity, 15 of One Style or List No.

For warehouse deliveries write nearest house. Delivery F. O. B. Factory, South Bend, Ind.

#### CUTTER CUTOUT PULLEYS

Nos. 20763 and 20773

#### FOR SERIES OR MULTIPLE CIRCUITS

An ingenious, simple and positive device which sustains the lamp and holds it in contact independent of the hoisting rope.

When the lamp is lowered, the circuit is closed. The circuit wires are run taut to the pulley and are never lowered. The lamp can be lowered straight down without interfering with trolley wires or other obstacles.

Lamps can be cleaned, trimmed, adjusted or replaced on live circuits with perfect safety. The pulley acts as a positive insurance against accidents and protects expensive lamps from damage under adverse conditions.

No ladders or poles to climb.

It is designed particularly for use on very high voltage circuits either D.C. or A.C.

The contacts are self-cleaning.

List No.

There is nothing about the pulley to wear or get out of order.

The switching and supporting features are entirely automatic and certain in operation.

You pull the rope—the pulley does the rest.

Recommended for use with wind-braced and long junior mast arms in place of outer mast arm pulleys.



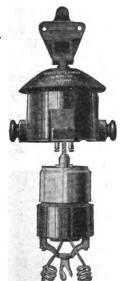
List No.

Nos. 20768 and 20778

For	For	•			
Series Circuits	Multiple Circuits	Description	Std. Pkg	Wt. Lbs.	Price Each
20761	20771	Threaded for 11/4 in. pipe	10	25	\$15.00
20762	20772	Threaded for 2 in. pipe	10	25	15.00
20763	20773	With cable clamp	10	25	15.00
20764	20774	With ¾ in. sleeve clamp	10	25	15.00
20765	20775	With 1 in. sleeve clamp	10	25	15.00
20766	20776	With 11/4 in. sleeve clamp	10	25	15.00
20767	20777	With 1½ in. sleeve clamp	10	25	<b>15.0</b> 0
20768	20778	With 11/4 in. mast arm clamp	10	25	15.00
20769	20779	With $1\frac{1}{2}$ in. mast arm clamp	10	25	15.00
20770	20780	With ceiling plate	10	25	15.00

Nos. 20761, 20762, 20771 and 20772 are rigid and designed for use on innerrope fixtures. Other styles are free to swing into line with hoisting rope.

Use Cutter  $\frac{3}{6}$  inch Banner Core Rope or  $\frac{1}{4}$  inch ebony wire rope with these pulleys.



End View with Supporting Knob Disconnected, as when Lamp is Lowered for Trimming

#### JUPITER CUT-OUT PULLEYS FOR SERIES CIRCUITS

Built along the same general lines as Cutter standard cut-out pulleys, but designed for extra heavy duty service. Recommended for D.C. and A.C. series circuits of 2300 volts or higher and for localities where atmospheric conditions demand extra high insulation and heavy current carrying parts. Made for rope or chain as ordered.

List No.	Description	Std. Pkg.	Wt. Lbs.	Price Each
21470	With cable clamp	10	65	\$21.00
21471	With 11/4 in. mast arm clamp	10	65	21.00
21472	With 1½ in. mast arm clamp	10	65	21.00
21473	With 2 in. mast arm clamp	10	65	21.00

Delivery F. O. B. Factory, South Bend, Ind. For warehouse deliveries write nearest house.

#### Pulleys and Clamp Knobs



#### LAMP-SUPPORTING PULLEYS

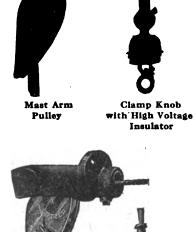
Holds the lamp when raised and releases it when about to be lowered. Has a long swivel clamp to fit any size suspension wire or cable and a malleable iron clamp knob to hold the lamp. On raising the lamp, this knob is engaged by ridges on the sides of the pulley and takes all the strain off the rope. Another pull at the rope guides the knob out so that the lamp can be readily lowered. The action is entirely automatic. You pull the rope till it reaches a dead stop, and the pulley does the rest. There are no extra catches or fingers to bend out of shape or bind on the casing or to get clogged with sleet. It is the only weatherproof safety pulley that works every time. The clamp knob clamps any size rope up to  $\frac{1}{2}$  inch.

	ist Io.	Description	Std. Pkg.		Price Each			
2	0782	With clamp knob only	50	9	\$2.18			
2		With high voltage insulator		12	3.53			
2	0784	With triple insulation arm	50	13	4.20			
		With Jupiter crossarm		16	4.88			
	For galvanizing, add 75 per cent. to list price.							

#### MAST ARM PULLEYS

A modification of the lamp-supporting pulley, having an extra strong single piece clamp, which fits the iron pipe of a mast arm and which also forms the headpiece, so that the strain rods can be run direct to it.

For 11/4 inch (Bore) Pipe		
20786 With clamp knob only 50	10	\$2.48
20787 With high voltage insulator 50	13	3.83
20788 With triple insulation arm 50	14	4.50
20789 With Jupiter crossarm 50	17	5.18
For 1½ inch (Bore) Pipe		
20790 With clamp knob only 50	10	\$2.48
20791 With high voltage insulator 50	13	3.83
20792 With triple insulation arm 50	14	4.50
20793 With Jupiter crossarm 50	17	5.18
For galvanizing, add 75 per cent. to list pri	ce.	



#### INNER-ROPE PULLEYS

A lamp-supporting pulley with a hooded end clamp for use with mast arms in which the rope runs through the pipe. For 11/4 inch (Bore) Pipe

20794 20795 20796	With clamp knob only	50 <sup>-</sup> 50	14 17 18	\$2.70 4.05 4.73
20797	With Jupiter crossarm	50	21	5.40
20200	For 1½ inch (Bore) Pip			40.70
20798	With clamp knob only	50	14.	<b>\$</b> 2.70
20799	With high voltage insulator	50	17	4.05
20800	With triple insulation arm	50	18	4.73
20801	With Jupiter crossarm	50	21	5.40
Fo	r galvanizing, add 75 per cent. to list	pri	ce.	

#### CLAMP KNOBS

20802 20803	With hook only	11/2	\$0.45 1.80
20804	With triple insulation arm 100	6	2.48
20805	With Jupiter crossarm100	9	3.15
10			

For galvanizing, add 75 per cent. to list price. Triple Insulation Arm \*Delivery F. O. B. Factory, South Bend, Ind. For warehouse deliveries write nearest house.

Clamp Knob with

Inner-Rope Pulley

#### Miscellaneous Pulleys



Outrigger Pulley

Ceiling Pulley



Swivel Pole Pulley



Interchangeable Pulley



**Duplex Pole Pulley** 



Plain Roof Pulley \*Delivery F. O. B. Factory, South Bend, Ind.

#### **OUTRIGGER PULLEYS**

A form of the lamp-supporting pulley, with a clamp to fit the pipe. Furnished with clamp knob.

		*List
Std.	Wt.	Price
Pkg.	Lbs.	Each
5Ŏ	9	<b>\$</b> 2.15
50	9	2.25
50	10	2.40
50	10	2.48
	Pkg. 50 50 50	50 10

#### CEILING PULLEYS

A form of the lamp-supporting pulley, with a plate for use on bridges or under beams in shops or yards.

20810	With clamp knob only	50	9	\$2.48
20811	With triple insulation arm	50		4.50
20812	With Jupiter crossarm	50	16	5.18

#### SWIVEL POLE PULLEYS

A weatherproof pole pulley, swiveled so that it can swing sideways and keep in line with the hoisting rope. Has a strong malleable iron pole plate. 

#### JUMBO POLE PULLEYS

Similar to the above, but larger, to take 34 inch rope. 20814 ...... 75 51/2 \$1.65

#### **DUPLEX POLE PULLEYS**

Consists of a pair of swivel pole pulleys fastened to a simple malleable iron pole plate. 20815 ...... 50 \$2.25

#### INTERCHANGEABLE PULLEYS

A weatherproof pulley with a universal clamp made of malleable iron, which will grip any standard size of suspension wire or cable. By taking out the two bolts the clamp can be opened out so as to form a wall plate, which fits the curved surface of a pole and which is easily fastened in place by lag screws. When so used, it makes a swiveled pole pulley similar in action to the Cutter Swivel Pole Pulley.

#### JUMBO 'CHANGEABLE PULLEYS

Similar to the interchangeable pulley, but larger, to take 3/4 inch rope. 51/2 \$1.65

#### SLEEVE PULLEYS

A weatherproof pulley with a sleeve clamp to grip iron pipe.  $5\frac{1}{4}$  \$1.20  $5\frac{1}{2}$  1.28 20818 20819 For 1 inch (bore) pipe........... 100 20820 For 1½ inch (bore) pipe...... 100 20821 For 1½ inch (bore) pipe....... 100

#### PLAIN ROOF PULLEYS

A companion to the ceiling pulley, with a ceiling plate for bridges, beams, etc.

For galvanizing any of the above, add 75 per cent. to list

price. For warehouse deliveries write nearest house.

18 Street Lighting Appliances

#### Pulleys and Windlasses



Plain End Pulley

Medium Pulley



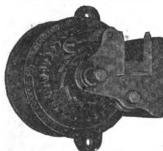
Pole Housing



Tail Pulley



Combination Pole Windlass





Combination Wall Windlass

Pinion Handle

#### PLAIN END PULLEYS

A plain weatherproof pulley with an end clamp to fit mast arm pipes.

List		td.	Wt.	*List Price
No.	Description P	kg.	Lbs.	Each
20823	For 11/4 in. (bore) pipe	00	$6\frac{1}{2}$	\$1.35
20824	For $1\frac{1}{2}$ in. (bore) pipe	.00	$6\frac{3}{4}$	1.35

#### MEDIUM PULLEYS

A center suspension pulley with long supporting clamp and weatherproof casing, but with no safety features. Takes any size rope up to 1/2 inch in diameter and is second only to the Cutter Lamp-Supporting Pulley.  $100 \ 5\frac{1}{2}$ 

#### POLE HOUSING

The pole plate and pulley casing are made in one piece, with the sheaves placed so the rope can run though the pipe, as with the Cutter Inner-Rope and Corporal Mast Arms.

				*List
List		Std.	Wt.	Price
No.	Description	Pkg.	Lbs.	Each
20826	For 11/4 in. (bore) pipe	75	61/2	\$1.80
20827	For 1½ in. (bore) pipe	75	634	1.80

#### TAIL PULLEYS

A companion to the pole housing for use with Cutter Inner-Rope and Corporal Mast Arms.

20828	For $1\frac{1}{4}$ in.	(bore) pipe(bore) pipe	75	6¾	\$1.35
20829	For $1\frac{1}{2}$ in.		75	7	1.35

#### COMBINATION POLE\_WINDLASSES

These are self-locking safety windlasses which can be used either as plain or geared windlasses at the option of the trimmer. Can be used as plain windlass to lower the lamp quickly, and then by inserting the handle further into the drum, changed to a geared windlass to raise the lamp. These windlasses are perfectly safe for heavy lamps, the whole device being made as fool-proof as possible.

The pinion handle is detachable so that it can be used with any number of windlasses.

The drum will hold 60 feet of  $\frac{1}{2}$  inch Ebony Wire Rope or 40 feet of  $\frac{3}{2}$  inch Banner Core Rope.

Prices below do not include handle.

		~· •		*List
List		Std.	₩t.	Price
No.	Description	Pkg.	Lbs.	Each
20830	For wood poles	25	22	<b>\$6.38</b>
20831	For 5 in. (bore) pipe	25	24	6.75
20832	For 6 in. (bore) pipe	25	25	7.13
20833	For 7 in. (bore) pipe	25	27	7.50

#### COMBINATION WALL WINDLASSES

Similar to the combination pole windlass, but with a side plate for fastening to walls. **\$**6.75

#### PINION HANDLES

For combination pole and wall windlasses.

\$2.25

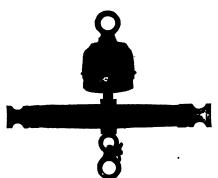
For galvanizing any of the above, add 75 per cent. to list price.

\*Delivery F. O. B. Factory, South Bend, Ind. For warehouse deliveries write nearest house.

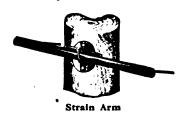
# No. 20836 No. 20837







Triple Insulation Arm





Double-braced Strain Arm
Delivery F O B Factory South Band

#### HIGH VOLTAGE INSULATORS

High voltage insulators have a double petticoat porcelain bell, which forms a good watershed and gives high insulation even in wet weather. The rivets which fasten the metal cap to the porcelain pass under the elongated head of the bolt which supports the hood, so that this could not drop out even if the porcelain were broken with a hammer. The cap is sealed with insulating material and the extra petticoat gives a large surface insulation, making the device well suited for use on arc circuits exposed to weather, smoke or fumes.

While designed especially for use on arc circuits of high voltage, the extra protection and the elimination of leakage afforded by this insulator make it a desirable one, even for circuits of comparatively low voltage.

	Std.	Wt., Lbs	. List
Description .	Pkg.	Each	Each
With ring above and sister hook			
below	100	4	\$1.35
With ring above and ring below	100	4	1.20
With clamp for wire rope above			
and with sister hook below.	100	4	1.65
With clamp for wire rope above			
and with ring below	100	4	1.50
With clamp for chain above and			
sister hook below	100	4	1.65
With clamp for chain above and			
ring below	100	4	1.50
galvanizing all iron parts, add 3	0 cen	ts each	to list
	With ring above and sister hook below	Description Pkg.  With ring above and sister hook below	With ring above and sister hook below

Triple insulation arms have a high voltage insulator above an enameled wood arm, thus giving a triple insulation between the line wire and the supporting ring.

The arm is coated with a baked enamel, which outwears paint in the weather, and has its ends bound by strong metal ferrules to prevent their splitting. Every part of the whole device is built for fine wear and high insulation, making it a fine insulating arm for all high voltage lamps, and the only low priced one adapted for use with alternating series lamps. It is second only to the Jupiter Cross-Arm.

List No.	Finish	Std. Pkg.	Wt., Lbs. Each	List Price Each
20852	Enameled	75	5	\$2.03
20853	Galvanized	75	5	2.40

#### STRAIN ARMS

#### As Furnished on Junior and Cadet Mast Arms

Strain arms are made of wrought iron with a cast iron pole plate.

•			List
List	Std.	Wt	Price
No.	Pkg.	Lbs.	Each
20746	100	81/2	\$1.80

#### DOUBLE-BRACED STRAIN ARMS

` As Furnished on Long Junior Mast Arms
Double-braced strain arms are longer than the

Double-braced strain arms are longer than the regular strain arms and have side braces to prevent rocking in high winds.

List	Std.	Wt.	List Price
No.	Pkg.	Lbs.	Each
20747	50	10	\$3.00
		.( '	

Delivery F. O. B. Factory, South Bend Ind. For warehouse deliveries write nearest house.

20, 21 & 22

Street Lighting Appliances

#### **CUTTER SOL-LUX PENDANTS** For Type C Lamps

## STANDARD PACKAGE QUANTITY, 10 OF ONE STYLE OR TRADE NUMBER

Cutter Sol-Lux senior and junior pendants are the same in all respects except for the size of the lower part of the casing forming the reflector and glass holder. Compensators are used with either style. The upper part of the casing is made of iron with ornamental ribs forming ventilation for Type C lamps. The lower part of the casing is made of 20 gauge copper. All iron parts are finished with high-grade weather resisting black enamel and copper parts in gun metal finish. Reflectors are made of steel and porcelain enameled.

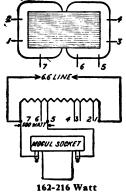
The junior pendant has a hinged holder for diffusing bowl or refractor or Sol-Lux diffuser.

The senior pendant has a holder with bayonet attachment for pear-shaped globes and is furnished with or without 24 inch reflectors as ordered.

Every Sol-Lux pendant has external binding posts and is wired for 6.6 or 7.5 ampere line as specified. Compensators (auto-transformers) for 600 C.P. lamps have extra taps for 400 C.P. lamps. Likewise, compensators for 1000 C.P. lamps have extra taps for 600 C.P. lamps as indicated by diagrams below. Compensators for 400 C.P., 15 ampere lamps may be wired for 12 ampere Furnished with Cutter Mogul lamp grip sockets.



Sol-Lux Junior Pendant with 18-Inch Reflector and Large Refractor



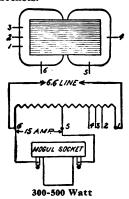
Connect lamps to taps 5 and 6. Connect one line to tap 6. Connect other line to:

Tap 1 for 6.6 ampere line and

15 ampere lamp, 400 C.P.
Tap 2 for 7.5. ampere line and 15 ampere lamp, 400 C.P.

Tap 3 for 6.6. ampere line and 12 ampere lamp, 400 C.P.

Tap 4 for 7.5 ampere line and 12 ampere lamp, 400 C.P.



For 500W (1000 C.P.) lamp connect socket to taps 5 and 7 and series line to taps 1 and 7 for 6.6 ampere service, and to taps 2 and 7 for 7.7 ampere service.

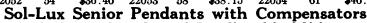
For 350W (600 C.P.) lamp connect socket to taps 6 and 7 and series line to taps 3 and 7 for 6.6 ampere service, and to taps 4 and 7 for 7.5 ampere service.



Sol-Lux Junior Pendant with 18-inch Reflector and Diffusing Bowl

#### Sol-Lux Junior Pendants with Compensators With 18 Inch Reflector and Large Holophane Refractor For 400 C.P. For 1000 C.P. For 600 C.P. 20 Ampere Lamp 15 Ampere Lamp 20 Ampere Lamp Wt., Lbs. List Wt., Lbs. List Wt., Lbs. List Price Price Each Each No. Each Each No. Each 54

Price No. Each 22025 22026 \$45.29 22027 **\$**43.40 58 \$47.95 With 18 Inch Reflector and Band Refractor 22062 \$43.40 22063 \$45.29 22064 \$47.95 52 56 With 18 Inch Reflector and Sol-Lux Diffuser 22043 51 \$35.70 22044 55 \$37.45 22045 \$40.25 With 18 Inch Reflector and Diffusing Bowl 22052 22053 \$38.15 \$40.95 **\$**36.40 58



Without Reflector but with Pear-Shaped Opal Globe 22031 \$33.25 22032 49 \$35.00 \$37.80 With 24 Inch Reflector and Pear Shaped Opal Globe 22034 55 \$37.45 22035 59 \$39.20 22036 \$42.00 With 24 Inch Reflector, Band Refractor and Clear Globe 22046 59 \$46.55 22047 63 \$48.30 22048 66 **\$**51.10 Without Reflector but with Band Refractor and Clear Globe

22073 \$46.90 22072 **\$**42.35 53 \$14.10 22074 56 Delivery F. O. B. Factory, South Bend, Ind. For warehouse deliveries write nearest house. Digitized by **GO**(



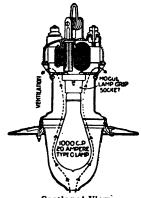
Sol-Lux Senior Pendant with Clear Pear Shaped Globe and Band Refractor Street Lighting Appliances

#### **CUTTER SOL-LUX PENDANTS**

FOR TYPE C LAMPS
Standard Package Quantity, 10 of One Style or List Number



Style C Pendant with Sol-Luz Diffuser



Sectional View Sol-Lux Style C Pendant



Style C Pendant Showing Hinged Holder

Cutter Sol-Lux Style C pendants are lighter in weight than the ordinary arc lamp, but of sufficient weight to prevent excessive swaying in the wind. Sturdy and simple construction, minimum number of parts, ample ventilation, external binding posts and insulated suspension ring, make these pendants ideal for street lighting purposes. They are practically indestructible. The casing is made entirely of high quality gray cast iron, and finished with weatherproof baked enamel. Equipped with Mogul screw lamp grip socket for multiple lamps or with compensators (auto transformers) for 15 and 20 ampere Type C Series Mazda lamps. (Regent film sockets are furnished for straight series lamps.)

Shipped complete as listed, with 18 inch porcelain enameled steel reflector, hinged holder for refractor or Sol-Lux diffuser and with or without glassware as ordered.\*

#### Sol-Lux Style C Pendants without Compensators

With Sol-Lux Diffuser
Mogul Screw Socket Regent Film Socket

	_	List			List
List	Wt., Lbs.	Price	List	Wt., Lbs.	Price
No.	Each	Each	No.	Each	Each
22101	42	<b>\$</b> 16.80	22102	43	\$18.20
	With	Large Holo	phane Re	ractor	
22103	<b>4</b> 8	<b>\$24</b> .50	22104	49	\$25.90
		With Band	Refractor		•
22105	46	<b>\$24.50</b>	22106	47	\$25.90
		*With Diff	using Bow	l	-
22107	45	<b>\$</b> 17.50	22108	46	<b>\$</b> 18.90
	With Hinged F	Refractor H	older, wit	hout Glasswar	
22109	43	\$14.70	22110	44	\$16.10



State on order how fixture is to be wired for line and lamp



Style C Pendant with Large Holophane Refractor

Style C Pendant with Diffusing Bowl

56	aue on c	ruer now.			virea for m	ie and ia	шp.	
			With S	ol-Lux	(Diffuser			
Fo	or 400 (	C.P.	F	or 600	C.P.	P. For 1000 C.P		
		Lamp	20 A	mpere	Lamp	20 A	mpere	Lamp
	Wt.,	List		Ŵt.,	List		Ŵt.,	List
List	Lbs.	Price	List	Lbs.	Price	List	Lbs.	Price
No.	Each	Each	No.	Each	Each	No.	Each	Each
22139	45	<b>\$29.40</b>	22140	47	<b>\$</b> 31.15	22141	52	\$37.95
•		With	Large l	Holoph	nane Refr	actor		
22142	51	<b>\$</b> 37.10	22143	53	<b>\$38</b> .85	22144	58	\$41.65
			With E	Band R	Refractor			
22145	49	\$37.10	22146	51	\$38.85	22147	56	\$41.65
			*With	Diffus	ing Bowl			•
22148	48	\$30.10	22149	50	\$31.85	22150	55	\$34.65
	With	Hinged	Refract	or Hol	der with	ut Glas	sware	
22155	46	\$27.30	22156	48	\$29.05	22157	53	\$31.85
*D	) iffusing	bowls ar	e fasten	ed with	thumb sc	rews; all	other g	lassware
with hi	nged h	olders.				_	-	

Delivery F O. B. Factory, South Bend, Ind. For warehouse deliveries write nearest house.

#### **CUTTER SOL-LUX FIXTURES**

#### For Type C Lamps—Bracket Styles

#### Standard Package Quantity, 20 of One Style or List Number

For 500 watt or smaller Type C lamps, use 6 x 10 inch opal globe or 6 x 8 inch Stalactite; for larger lamps, use 8 x 12 inch opal globe or Acorn Diffuser.

#### STANDARD BRACKETS WITH SOL-LUX HOLDERS

A simple form of bracket suspension, consisting of a 3 foot gooseneck of ½ inch pipe, with grooved wall plate, for inner wiring. The Sol-lux holder attached to the outer end is made of copper

The Sol-lux holder attached to the outer end is made of copper with gun metal finish. Furnished with Cutter Grip sockets, but not wired.

Med.	Screw	Skt.	Mogul	Screw	Skt.
			Price Each		

Description	Ea.	No.	Each	No.	Each
With 6 x 10 in opal globe	15	30037	\$8.89	30038	\$8.58
With 6 x 8 in. Stalactite				30040	
With 8x12 in. opalglobe	17	30041	8.95	30042	9.15
With 6 in. holder only	7	30043	5.69	30044	6.06
With 8 in. holder only	734	30045	6.06	30016	6.20

For galvanized gooseneck, add 30 cents list; for galvanized pole plate, add 15 cents list. For sign on globe of less than 20 letters, add \$2.22 list; for 20 or more letters, add \$4.44 list.

### SPARTAN JUNIOR BRACKETS WITH SOL-LUX HOLDERS

An artistic and substantial bracket which holds the lamp 3 feet from the wall. Made of  $\frac{1}{2}$  inch (bore) pipe, with wrought iron scrolls and grooved wall plate. The Sol-lux holder is made of copper and supplied in gun metal finish. Shipped complete with Cutter Grip sockets, but not wired.

With 6 x 10 in. opal globe	23	30047	\$10.65	30048	\$10.95
With 6 x 8 in. Stalactite	23	30049	9.92	<b>3</b> 0050	10.21
With 8 x 12 in. opal globe	15	30051	11.32	30052	11.61

For 6 inch Universal Holder, deduct \$1.85 from list with 6 inch Sol-lux holder; for 8 inch Universal holder, deduct \$1.85 from list with 8 inch Sol-lux holder. For 6 x 15 inch reflector, add \$1.85 to list; for 8 x 18 reflector, add \$2.96.

add \$1.85 to list; for 8 x 18 reflector, add \$2.96.

For galvanized bracket, add \$1.03 list. For sign on globe, add \$2.22 list for less than 20 letters; \$4.44 list for 20 or more.

#### WALL BRACKETS WITH SOL-LUX HOLDERS

Consists of a 4 foot gooseneck of ½ inch pipe with wall flange, allowing the pipe to extend 1 foot inside the wall and 3 feet outside. Furnished complete, as shown, with a Sol-lux holder and Cutter Grip socket, but not wired.

With 6 x 10 in. opal globe	16	30057	\$8.88	30058	\$9.18
With 6 x 8 in. Stalactite	16	30059	8.14	30060	8.43
With 8 x 12 in. opal globe	18	30061	9 54	30062	9.45
With 6 in. holder only	8	30063	6.28	30064	6.57
With 8 in. holder only	71/2	30065	6.57	30066	6.87

For galvanized gooseneck, add 37 cents list; for galvanized wall flange, add 22 cents list. For sign on globe, add \$2.22 for less than 20 letters; \$4.44 list for 20 or more.



#### With Sol-lux Concentric Dome Reflector

Consists of a 4 foot gooseneck of  $\frac{3}{4}$  inch pipe, terminating in a vertical piece of  $\frac{1}{2}$  inch pipe, which allows the hood to be raised for making connections. The wall flange slips over the pipe and fastens with a set screw.

#### With Sol-lux Holder (4 Inch Fitter) and 20 Inch Concentric Dome Reflector

With 8 x 12 in. opal globe	37	30067	\$15.74	30068	\$16.02
With 4 in, holder only		30071	9.25	30072	9.54
With reflector, without globe	27	30073	13.09	30074	13.36
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For galvanized bracket, add \$1.48 list.



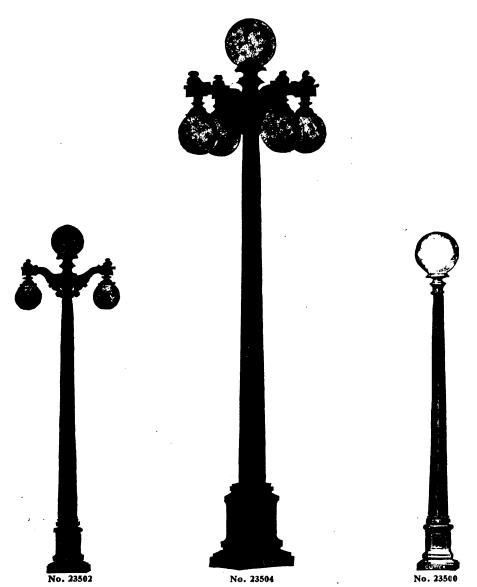




Wall Bracket with Sol-lux Holder and Opal Globe



Street Lighting Appliances

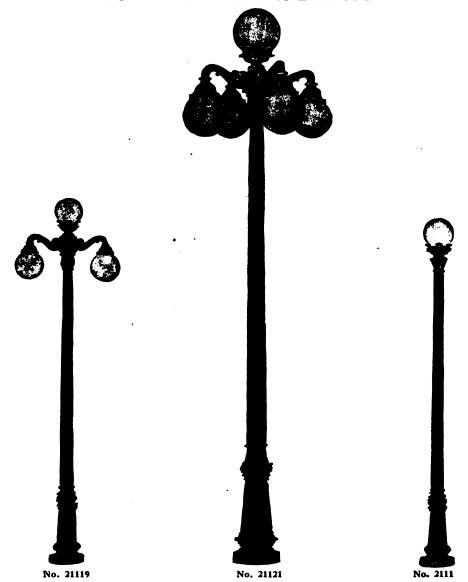


#### Commonwealth Design

Base, 18 inches square, 2 feet high; provided with hinged door and sufficient space for locating switch and cutout in base. Column, 8 inches octagon above the base, tapering to 4 inches octagon near the top. Height from ground to bottom of pendent globes, 11 feet; to top of top globe, 14 feet 3 inches; to top of globe on the 1 light post, 13 feet 6 inches. Distance from center to center of opposite globes, 36 inches. Pendent globes, 6 x 12 inches; top globe, 8 x 14 inches; globe for 1 light post, 8 x 16 inches.

List No.	No. of Lights	Std. Pkg.	Wt., Lbs Each	*List Price Each
23500	1	20	475	\$69.30
23501	2	20	560	75.60
23502	3	20	560	75.60
23503	4	20	665	81.90
23504	ð	20	665	81.90

For ground sections see listing elsewhere. Prices include sockets and glassware holders, but not glassware or wiring.



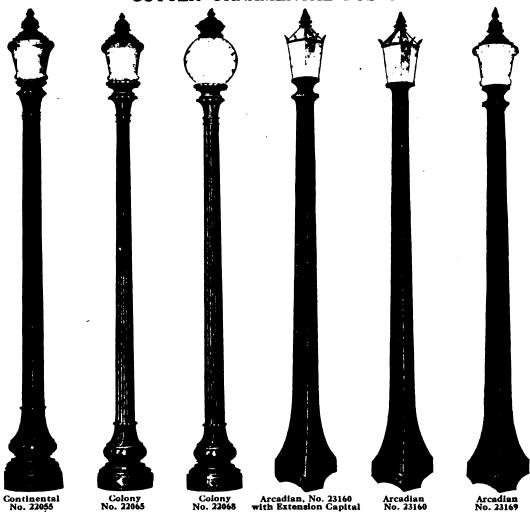
#### Boulevard Design

Base, 14 inches diameter, 2 feet 10 inches high; provided with two doors and sufficient space for locating switch and cutout in base. Column, 5½ inches diameter above the base, tapering to 3½ inches diameter near the top. Height, from ground to bottom of pendent globes, 10 feet; to top of top globe, 13 feet 2 inches; to top of globe on the 1-light post, 12 feet 7 inches. Distance from center to center of opposite globes, 32 inches. Pendent globes, 6x10 inches; top globe. 6x12 inches; globe for 1-light post, 8x14 inches.

			•	*List
List	No. of	Std.	Wt., Lbs.	Price
No.	Lights	Pkg.	Éach	Each
21117	1	20	. <b>300</b>	<b>\$44</b> .10
21118	2	20	335	<b>52.28</b>
21119	3	20	335	52.28
21120	4	20	375	59.85
21121	5	· <b>20</b>	` 375	59.85

For ground sections see listing elsewhere. Prices include sockets and glassware holders, but not glassware or wiring.

\*Delivery F. O. B. Factory, South Bend, Ind. For warehouse deliveries write nearest house.



No. 23160 Single-light Posts for Type C High Efficiency Mazda Lamps
The Continental Post is designed for "White Way" lighting, with Sol-lux Senior Top which accommo-

dates compensators for 15 and 20 ampere series Mazda lamps.

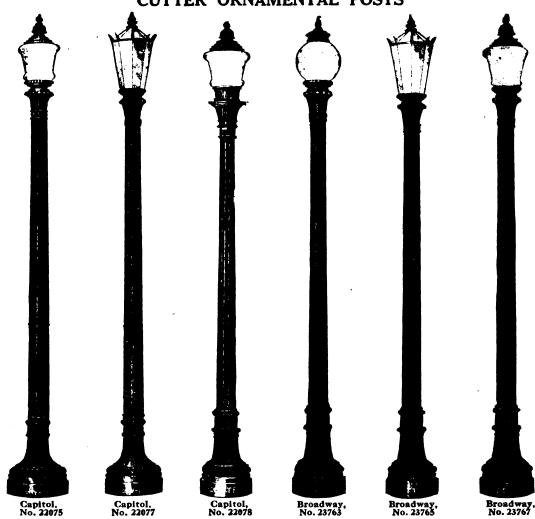
The Colony Post is a smaller size of the Continental.

The Arcadian Post is an original design of simple elegance embodying the latest idea of art. It is adapted to either business or residence districts of all cities and towns. Made in two sizes, designated Arcadian and Suburban, furnished with or without extension capital. Senior tops are used with the Arcadian and Suburban, furnished with or without extension capital. dian; Junior tops with Suburban.

Standard Package Quantity, 20 of One Style	C	continent	al	Colony			
	List	Wt., Lbs.	Price	List	Wt., Lbs.	Price	
Description	No.	Each	Each	No.	Each	Each	
With globe holder and Mogul screw socket	22051	500	<b>\$</b> 66 . <b>53</b>	22061	300	<b>\$</b> 44.47	
With Sol-lux ornamental top, Mogul screw socket	22055	520	89.21	22065	320	63.37	
Same, with Regent film socket	22056	521	90. <b>47</b>	22066	321	64.63	
With 16 inch diffusing ball, ventilator and Mogul							
socket	22058	520	79.75	22068	320	57.71	
Same, with Regent film socket	22059	521	81.01	22069	321	<b>58</b> .97	
, -		Arcadian	1	S	uburbar	<b>1</b>	
*With 8 in. globe holder and medium screw socket	23157	500	<b>\$</b> 66.15	23164	350	<b>\$</b> 50.40	
Same, with Mogul screw socket	<b>23158</b>	501	<b>66</b> . <b>53</b>	23165	351	<b>50.76</b>	
Same, with Regent film socket	23159	502	67.79	23166	352	52.03	
With octagonal, Mogul socket	23160	<b>526</b>	89.21	23167	373	72.19	
Same, with Regent film socket	<b>2</b> 3161	527	90.47	23168	374	77.45	
With Sol-lux top, Mogul screw socket	<b>2</b> 3162	521	89.21	23169	368	69.67	
Same with Regent film socket	23163	522	90.47	23170	<b>36</b> 9	70.93	
Extension capital for compensator coil furnished	when so	ordered f	or \$1.89	list addit	ional.		

\*Prices do not include glassware, compensators, wiring, lamps or foundation bolts.

Delivery F. O. B. Factory, South Bend, Ind. For warehouse deliveries write nearest house.



Single-light Posts for Type C High Efficiency Mazda Lamps
The Capitol Post is a massive standard of highly artistic design built especially for the lighting of busi-

The Scape of Your s a massive standard of highly at using design built especially for the lighting of business districts with high candle power incandescent lamps.

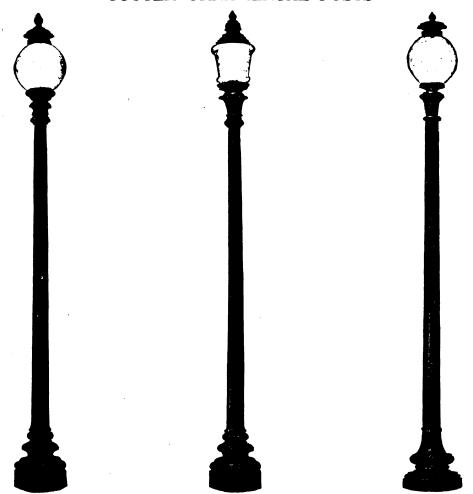
The Broadway Post is a massive standard of simple and artistic design.

It is especially adapted to white way lighting in large cities.

The Plaza Post is of the same design and dimensions as the Broadway, but shorter.

Standard Package (	<b>2uantity</b>	, 20 of	One Style			
		Wt.,	List		Wt.,	List
	List	Lbs.	Price	List	Lbs.	Price
Description	No.	Each	Each	No.	Each	Each
With Sol-Lux ornamental top, Mogul socket	22075	600	<b>\$</b> 98.66	22097	500	\$90.22
Same, with Regent film socket	22076	601	99.92	22098	501	91.48
With octagonal Senior top, Mogul socket	22077	600	101.18	22084	500	92.74
Same with Regent film socket	22083	601	102.44	22087	501	94.00
With 16 in. diffusing ball, ventilator and Mogul						
socket	<b>2</b> 2078	600	90.22	22099	500	39.88
Same, with Regent film socket	22079	601	91.48	22100	501	41.14
		Broadway	7		Plaza	
With Sol-lux Senior top, Mogul socket	23763	600	<b>\$</b> 96.5 <b>2</b>	23769	525	\$90.22
Same, with Regent film socket	23764	601	97.78	23770	526	91.48
With octagonal Senior top, Mogul socket	23765	600	99.04	23771	525	92.74
Same, with Regent film socket	23766	601	100.30	23772	526	94.00
With 16 in. diffusing ball, ventilator and Mogul						
socket	23767	600	86.06	23773	525	79.76
Same, with Regent film socket	23768	601	87.32	23774	526	82.02
Use four 1 inch foundation bolts.				000	L	

Delivery F. O. B. South Bend, Ind. For warehouse deliveries write nearest house.



Park View, with 16 Inch Diffusing Ball and Ventilator

Park View, with Sol-lux Junior Top

Villa, with 16 Inch Diffusing Ball and Ventilator

#### Single-light Standards for Type C High Efficiency Mazda Lamps

The Park View Post is designed especially for lighting parks, boulevards and entrances to public buildings. Base, 16 inches in diameter, 17 inches high. Column, 5½ inches in diameter above the base, tapering to 3½ inches in diameter near the top. Height to top of standard globe holder, 10 feet; to bottom of Sol-lux Junior Globe, 10 feet 3½ inches; to top of ventilator on 16

inch ball globe, 12 feet.

The Villa design has a base 17 inches in diameter, 181/4 inches high. Column, 5 inches in diameter above the base, tapering to 2% inches in diameter near the top. Height to top of standard globe holder, 10 feet; to top of ventilator on 16 inch ball globe, 12 feet. Standard globe holder has 8 inch fitter.

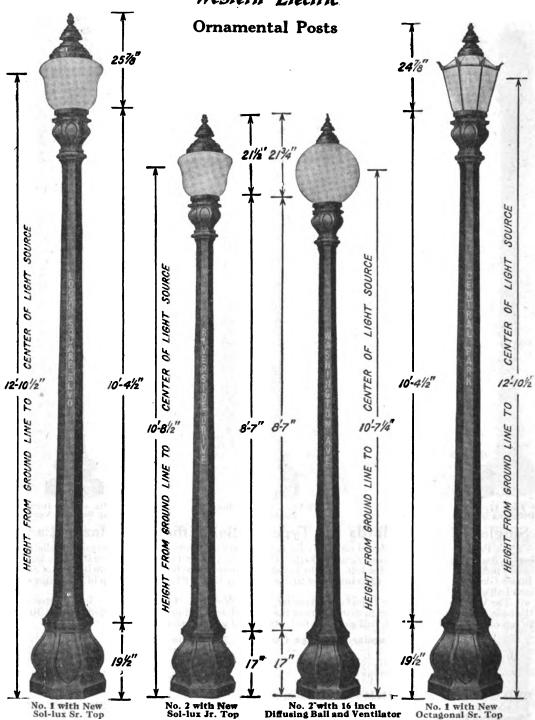
#### Standard Package Quantity, 20 of One Style

	P	ark Vi	ew	,	-Villa	
	•.	Wt.,	List		Wt.,	List
	List	Lbs.	Price	List	Lbs.	Price
Description	No.	Each	Each	No.	Each	Each
*With 8 in. standard globe holder and medium screw						
socket	22435	300	<b>\$44</b> .10	22426	300	\$44.10
*Same, with Mogul screw socket	22436	301	44.48	22427	301	44.48
*Same, with Regent film socket	22437	302	45.74	22428	302	45.74
With Sol-lux Junior top, Mogul socket	22431	312	64.26			
Same, with Regent film socket	22432	313	65.52			
With 16 in. diffusing ball, ventilator and Mogul						
Socket	22433	312	57.71	22429	312	57.71
Same, with Regent film socket	22434	313	58.98	22430	313	58.98
***************************************		1 1/				

\*Glassware and ventilators extra. Use three ¾ inch foundation bolts.

Delivery F. O. B. Factory, South Bend, Ind. For warehouse deliveries write nearest house.

## Western Electric Western Electric



No. 1 with New Sol-lux Sr. Top Sol-lux Jr. Top Diffusing Ball and Ventilator Octagonal Sr. Top

No. 1 Standards are recommended for use with Sol-lux Senior and Octagonal Senior Tops, No. 2 Standards for use with Sol-lux Junior and Octagonal Junior Tops. Ball globes having 8 inch fitters may be used with either standard. Prices below cover standard only with globe holder, porcelain disc and socket. Globes, ventilators and compensators are listed on the next page. Use four foundation bolts, 3/2 inch to 1 inch diameter.

No. 1 Standard

No. 2 with 16 inch
Diffusing Ball and Ventilator
No. 2 Standards for use with Sol-lux Senior and Octagonal Senior Tops, No. 2 Standards or use with sol-lux Junior and Octagonal Senior Tops, No. 2 Standards or use with Sol-lux Junior and Octagonal Senior Tops, No. 2 Standards or use with Sol-lux Junior and Octagonal Senior Tops, No. 2 Standards or use with Sol-lux Junior and Octagonal Senior Tops, No. 2 Standards or use with Sol-lux Junior and Octagonal Senior Tops, No. 2 Standards or use with Sol-lux Junior and Octagonal Senior Tops, No. 2 Standards or use with Sol-lux Junior Tops.

No. 1 Standard Octagonal Senior Tops, No. 2 Standards or use with Sol-lux Junior Tops, No. 2 Standards or use with Sol-lux Junior Tops, No. 2 Standards or use with Sol-lux Junior Tops, No. 2 Standards or use with Sol-lux Junior Tops, No. 2 Standards or use with Sol-lux Junior Tops, No. 2 Standards or use with Sol-lux Junior Tops, No. 2 Standards or use with Sol-lux Junior Tops, No. 2 Standards or use with Sol-lux Junior Tops, No. 2 Standards or use with Sol-lux Junior Tops, No. 2 Standards or use with Sol-lux Junior Tops, No. 2 Standards or use with Sol-lux Junior Tops, No. 2 Standards or use with Sol-lux Junior Tops, No. 2 Standards or use with Sol-lux Junior Tops, No. 2 Standards or use with Sol-lux Junior Tops, No. 2 Standards or use with Sol-lux Junior Tops, No. 2 Standards or use with Sol-lux Junior Tops, No. 2 Standards or use with Sol-lux Junior Tops, No. 2 Standards or use with Sol-lux Junior To

		NO. I DIBIUM	u	No. 2 Standard			
	Trade	Shpg. Wt.	Price	Trade	Shpg. Wt.	Price	
8ocket	No.	Lbs. Each	Each	No.	Lbs. Each	Each	
Medium screw multiple socket	22580	450	\$66.40	22583	350	\$58.84	
Mogul screw multiple socket	22581	450	66.78	22584	350	59.22	
Regent film series socket	22582	451	68.04	22585	_ 351	60.48	
Delivery F. O. B. Factory, South Bend, Ind. For	warehou	se deliveries	write neares	t-house.	016		
			Digitizou		0		

#### PARTS FOR CUTTER AND WESTERN ELECTRIC POSTS



Ornamental Top



Sol-lux Junior Ornamental Top



Western Electric Casing with New Style Sol-lux Senior Top



Western Electric Casing with New Style Octagonal Senior Top

#### SOL-LUX ORNAMENTAL POST TOPS FOR TYPE C LAMPS

Made in two sizes, designated Senior and Junior, respectively. The casings fit over cylindrical shanks 3½ inches in diameter and 5 inches high. Both have 8 inch globe fitters and accommodate compensators for 15 and 20 ampere Type C lamps. The Senior casing is made for poles with columns about 6 inches in diameter near the top; Junior casing, about 3½ inches. Sol-lux Senior tops may be used on Capitol, Continental, Broadway and Plaza columns; Junior tops on Chicago, Avenue, Riverside, Boulevard, Midway and Park View columns.

Deduct \$4.03 list from prices of 1 light posts for globe holder and medium screw socket and add prices

of parts listed below.

Height of Senior casing, 13½ inches; Junior casing, 12 inches. Height of Sol-lux Senior globe, 14¾ inches; Sol-lux Junior globe, 13 inches. Height of Senior ventilator, 12 inches; Junior, 10 inches. Ventilators are equipped with white enameled reflectors which direct the maximum amount of light into useful planes.

		Senior			-——Jui	ior	
	List	Wt., Lbs.	Price	List	Std.	Wt., Lbs.	Price
Description	No.	Each	Each	No.	Pkg.	Each	Each
Sol-lux casing without socket*	22477	30	<b>\$</b> 8.8 <b>2</b>	<b>224</b> 81	20	20	<b>\$</b> 6.30
Sol-lux high efficiency globe	22478	11	9.45	22482	20	9	7.56
Sol-lux ventilator with reflector	22479	9	13.23	22483	20	8	11.30
Complete Sol-lux top, less socket*	22480	50	31.50	<b>22</b> 484	20	37	25.20

\*Add following list prices for sockets: Medium screw, 63 cents; Mogul screw, \$1.01; Regent Film, \$2.27. Compensators with Mogul screw sockets are listed below.

#### Western Electric SOL-LUX ORNAMENTAL POST TOPS

The Western Electric casing is equipped with 8 inch globe fitter and is designed for use with porcelain disc insulator, socket and compensator. Furnished with either the new style Sol-lux Senior or Junior globe with ventilator, socket and compensator. Turnished with either the new style Sorious Semior of Junior globe with ventilator, or with the new style Octagonal lantern globes and ventilators in either the Senior or Junior sizes. The casing is 13½ inches high and fits a post column having a cylindrical shank 3½ inches outside diameter, 5 inches high. The globes are made of high efficiency glass and the ventilators are spun steel, porcelain enameled black outside, white inside. These new style globes and ventilators may be used with Cutter posts listed on previous pages by deducting parts listed above and adding corresponding parts listed below.

		Senior			Junior	
	List	Shpg. Wt.	Price	List	Shpg. Wt.	Price
Description	No.	Lbs. Each	Each	No.	Lbs. Each	Each
Western Electric casing only	. 22165	<b>2</b> 8	<b>\$</b> 6.30	22165	<b>2</b> 8	<b>\$</b> 6.30
Porcelain disc with medium screw multiple socket				22158	5	1.51
Same, with Mogul screw multiple socket	<b>‡22159</b>	5	1.89	<b>2</b> 2159	5	1.89
Same, with Regent film series socket	. 22160	6	3.15	<b>22</b> 160	6	3.15
New Sol-lux globe	. 22167	18	10.71	22169	14	6.93
New Sol-lux ventilator with reflector	. 22168	10	9.45	22170	9	8.19
New Octagonal globe	. 22373	18	13.86	22376	14	9.45
Trimmings for above	. 22374	7	${f 2}$ . ${f 52}$	22377	6	1.89
Ventilator for above	. 22375	5	5.04	22375	5	5.04
8 x 16 x 6 diffusing ball globe	. 22359	18	10.71	22359		10.71
				1 400 0	<b>-</b>	

tSenior tops are designed for use with 300 watt or larger multiple lamps and 400 C.P. or larger series senior tops are designed for use with 500 watt or targer intultiple tailings and 400 C.P. or larger series lamps. Junior tops are designed for use with 500 watt or smaller multiple lamps and 400 C.P. or smaller series lamps. For 5 and 20 ampere lamps add to list price of porcelain disc with Mogul multiple socket, \$12.60 list for 400 C.P. coil, \$14.61 list for 600 C.P. coil and \$16.38 list for 1000 C.P. coil. For 250 C.P. reactance coil for 6.6. ampere circuit, add \$11.34 list. All prices cover coils for 60 cycle frequency. Delivery F. O. B. Factory, South Bend, Ind. For warehouse deliveries write nearest house.

#### PARTS FOR CUTTER ORNAMENTAL POSTS

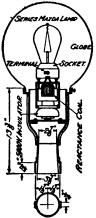


Gas Post with Head

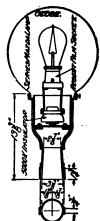


Post Head with 7x14 in. Diffusing Ball

\*Standard Package, 20.



Post Head with Reactance Coil POST HEADS



Post Head Regent Film Socket

Designed for converting gas posts into electric light standards. Fits gas post columns or steel poles of 21/2 inch internal diameter. Equipped with Mogul socket and reactance coil (for use on series circuits without regulator) or with Cutter Lamp Grip Multiple Sockets or Regent film socket. A high voltage insulator protects all live parts from grounds. Globe holder has 7 inch fitter. Prices do not include globes.

	With Res	ctance Coil	and Mogu	l Sockets
List No.	List No.	Size of	•	
4 Amperes.	6.6 Amperes,	Lamp	Std.	Weight.
60 Cycle	60 Cycle	C.P.	Pkg.	Lbs.
23051	23147	32	20	21

4 Amperes.	6.6 Amperes,	Lamp	Std.	Weight.	Price
60 Cycle	60 Cycle	C.P.	Pkg.	Lbs.	Each
23051	23147	32	20	21	\$14.61
23052	23148	40	20	211/2	14.80
23053	23149	60	20	22	15.12
23054	23150	80	20	23	15.87
23055	23151	100	20	25	16.13
23056	23152	200	20	28	20.41
		3371. C 1			

Medium Scre	w Sock	cet		S <b>ockets O</b> Screw Socke		Reger	t Film Socket	
	Wt.,		-	Wt.,		•	Wt.,	
List	Lbs.	Price	List	Lbs.	Price	List	Lbs.	Price
No.	Each	Each	No.	Each	Each	No.	Each	Each
23153*	18	\$6.93	23154*	19	<b>\$</b> 7.31	23155*	20	\$8.57

#### **POTHEADS**

Has	an iron bracket support for mounting in base of post.			
List		Std.	Wt., Lbs.	Price
No.	Description	Pkg.	Each	Each
23156	In ordering, give external diameter of cables	<b>20</b>	10	<b>\$3</b> .78
23156A	Sealing Compound (1 pound for each)			. 15

#### **GROUND SECTIONS**

Prices of posts on preceding pages do not include foundation bolts or ground sections.							
When cast iron ground sections are used, bolts are supplied for fastening bases of posts to							
ground sections. Foundation bolts listed below.	_						
21138 Commonwealth and Midway	20	225	<b>\$</b> 20.16				
21144 Broadway, Plaza, Capitol, Continental, White Wa	ıy,						
Residential, Park Way and Flaming Arc	20	225	20,16				
21139 Avenue		225	20.16				
21115 Chicago	20	225	20.16				
21140 Riverside	20	160	16.38				
21142 Park View and Colony	20	150	15.75				
21116 Villa	20	160	16.38				
21141 Boulevard		110	15.12				
FOUNDATION BOLTS							

FOUNDATION BOLTS Prices cover round head machine bolts with hexagon nuts. Wrought washers are

10 per	r cent. lis	t extra.				•		•	
Length					Length,				
Bolt, In	ns. ¾ In.	7∕8 In.	1 In.	1¼ In.	Bolt, Ins.	3/4 In.	% In.	1 In.	11/2 In.
8	\$0.17	\$0.22	<b>\$</b> 0.37	<b>\$0</b> .69	18	\$0.30	<b>\$</b> 0.39	<b>\$</b> 0.57	\$1.07
10	.20	.26	.40	.73	20		.44	.63	1.13
12 .	.22	.30	.45	.81	24			.73	1.26
15	.27	.35	.50	.94					• • • • • •

Delivery F. O. B. Factory, South Bend, Ind. For warehouse deliveries write nearest house. Digitized by 48 Street Lighting Appliances





#### **CUTTER ORNAMENTAL NEWELS** For Type C Lamps

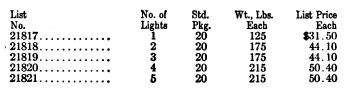
#### SOL-LUX GATE POST NEWELS

These newels are made of the highest quality gray iron. They are of distinctive design and very appropriate for the lighting of

gateways and private grounds, entrances of buildings, etc.

Base, 14 inches in diameter, 24 inches high. Column, 5 inches in diameter above base, tapering to 3½ inches in diameter near the top. Height from base plane to bottom of side globes, 3 feet 8 inches; to bottom of center globe, 4 feet 61/2 inches; to bottom of globe of 1 light newel, 3 feet 8 inches. Distance from center to center of opposite globes, 30 inches. Designed for 6 x 9 inch or 6 x 10 inch side globes, and 6 x 12 inch or 6 x 14 inch top globe.

Prices below include medium screw sockets for side lamps and Mogul screw sockets for center lamps, unless otherwise specified. Prices do not include globes, ventilators, lamps, wiring or foundation bolts. Use three 3/4 inch bolts.



#### SOL-LUX BRIDGE NEWELS

Similar in design to Sol-lux Gate Post Newel but higher. 14 inches in diameter, 24 inches high. Column, 5 inches in diameter above the base, tapering to 3½ inches in diameter rear the top. Height from base plane to bottom of side globes, 6 feet; to bottom of center globe, 6 feet 10½ inches; to bottom of globe on the 1 light newel, 6 feet. Distance from center to center of opposite globes, 30 inches. Designed for 6 x 9 inch or 6 x 10 inch side globes and 6 x 12 inch or 6 x 14 inch center globes.

Arms may be reversed for pendent clusters.

Prices below do not include globes, ventilators, lamps, wiring or foundation bolts. Use three 34 inch bolts. Prices include medium screw sockets for side lamps and Mogul screw sockets for top lamps.

		Prices
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Sol-lux Gate Post Newels

Sol-lux Bridge Newels Delivery F. O. B. Factory, South Bend, Ind. For warehouse deliveries write nearest house.

List	No. of	Std.	Wt., Lbs.	List Price
No.	Lights	Pkg.	Each	Each
21825	ĭ	2Ŏ	175	\$40.94
21826	2	20	225	53.54
21827	3	20	225	53.54
21828	4	20	265	<b>5</b> 9.84
21829	5	20	265	59.84

#### **GLOBES**

			Wt.,	List
List		Std.	Lbs.	Price
No.	Description	Pkg.	Each	Each
21830	6x9 in. diffusing ball	<b>2</b> 0	6	\$2.20
21842	6x10 in. diffusing ball	20	7	2.52
21831	6x12 in. diffusing ball (without			
	top fitter)	20	8	3.15
21832	6x12 in. diffusing ball (with			
	$5\frac{1}{2}$ in. top fitter)	20	8	3.15
21833	6x14 in. diffusing ball (with			
	$5\frac{1}{2}$ in. top fitter)	20	9	4.42
21791	8x16 in. diffusing ball (with			
	6 in. top fitter)	20	10	8.19

#### **VENTILATORS**

List No. 21792 Wi	Description th 6 in. fitter	Std. Pkg. 20	Wt., Lbs. Each 9	Price Each \$5.04
17	1.21	000	0	

#### CUTTER BRACKETS, NEWELS AND TRAFFIC POSTS



Sol-lux Wall Bracket

## 'Safety First'' Traffic Post Metropolitan

Newel



Commerce Newel

SOL-LUX WALL BRACKETS
For Type C Lamps
A massive bracket of highly artistic design. Wall plate, 2 feet high, 6 inches wide. Distance from wall to center of lamp, 3 feet. Height from bottom of shaft to top of ventilator on Sol-Lux Senior globe 6 feet 6½ inches.

List No.	Description	Std. Pkg.		List Price Each
22542	With Sol-Lux Senior top, Mogul socket	20	375	<b>\$</b> 85.68
22543	With octagonal Senior top, Mogul socket	20	380	88.20
TA	m wands antique Gnish add 00 20 1;	-4	Con month	

For verde antique finish, add \$6.30 list. For weatherproof bronze paint add \$12.60 list.

METROPOLITAN NEWELS

A newel of simple but artistic design, adapted for lighting the entrances of buildings or for bridges and public places. Base 14 inches square, 2 feet high. Column 5 inches octagon above the base, tapering to 31/2 inches octagon near the top. Height from base to bottom of globe 7 feet; to top of ventilator on octagonal Junior globe 8 feet, 9 inches. Globe holder has 8 inch fitter. Use four 3/4 inch foundation bolts.

22548	With octagonal Junior top,			
	medium screw socket	20	225	\$65.52
22549	Same, with Mogul screw socket	20	226	65.89
22550	Same, with Regent film socket	20	227	67.15
22566	With Sol-Lux Junior top, medium			
	screw socket	20	220	63.00
22554	Same, with Mogul screw socket	20	221	63.37
22555	Same, with Regent film socket	20	222	64.62
F	r verde entique finish add \$6.30	ligt.	for west	hernroof

ish, add \$6.30 list; for weat bronze paint, add \$12.60 list.

"SAFETY FIRST" TRAFFIC POSTS

By marking the centers of intersecting streets the rule of "keep to the right" is always enforced. These traffic posts are

Base, 14 inches in diameter, 24 inches high. Column 5 inches in diameter above the base, tapering to 3½ inches in diameter near the top. Height from base plane to bottom of

globe on the 1 light newel, 6 feet. Prices of newels do not include globes, lamps, wiring or

foundation bolts. These are listed separately below.

27000	6 in. holder, medium multiple			
	socket	20	175	\$40.15
27001	8 in. holder, medium multiple			
	socket	20	176	40.15
21825	6 in. holder, Mogul multiple			
	socket	20	176	40.95
27003	8 in. holder, Mogul multiple			
	socket	20	177	40.95
27004	6 in. holder, Regent film socket	20	177	41.90
27005	8 in. holder, Regent film socket	20	178	41.90
27006	6 x 12 in. ruby globe, extra	20	8	10.08
27007	8 x 14 in. ruby globe, extra	20	9	15.12
21831	6 x 12 in. diffusing ball, extra	20	8	3.15
22489	8 x 14 in. diffusing ball, extra	20	9	4.41
	Set of three 3/4 x 12 in. foundation	1		
	bolts	20		.68
20938	Fixed pin clamp arm	20	6	1.01
20942	Pinless clamp arm	20	61/2	1.01
	COMMERCE NEWE	LS		

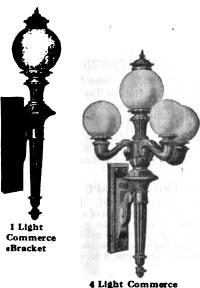
A massive newel designed especially for bridges and entrances to large buildings, etc. Base, 21 x 35½ inches. Height from ground to bottom of pendent globes 4 feet 6 inches; to top of eagle ornamentation on top globe 9 feet 6 inches; to top of eagle ornamentation on 1 light newel, 8 feet. Pendent globes, 8 x 14 inches; top globe, 8 x 20 inches; globe for 1 light newel 8 x 20 inches. Prices below include medium screw base sockets, glassware as above specified and eagle oramentation, but not foundation bolts. Use four 1/8 inch foundation bolts.

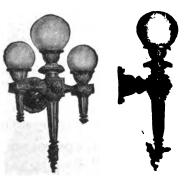
22561 -1 light..... 475 \$157.50 22563 170.10 189.00

Delivery F. O. B. Factory, South Bend, Ind. For warehouse deliveries write nearest house.

#### CUTTER ORNAMENTAL BRACKETS







Bracket

1 Light Corridor 3 Light Corridor **Bracket** 

#### MIDGET BRACKETS

A light cast iron bracket designed for small sizes of lamps which do not require ventilation. Has a threaded stem for attachment to crowfoot or conduit. Diameter of wall canopy, 51/4 inches. Distance from end of stem to center of globe, 6 inches. Equipped with 41/4 inch holder and medium screw socket, but not wired.

			W t.,	
List		Std.	Lbs.	Price
No.	Description	Pkg.	Each	Each
21835	With 4 x 8 in. diffusing globe	20	12	\$5.98
	Without globe		7	4.09

#### REVERSIBLE BRACKETS

When ventilation is not necessary, this bracket may have the globe hang downward. In this position, the bracket has the same artistic lines and correct proportions as in the position illustrated. Distance from wall to center of globe, 2 feet. Distance between centers of wall plates, approximately 20 inches. Fitted with 8 inch globe holder.

Prices do not include globe, ventilator or wiring.

21248	Medium screw socket	20	65	\$18.90
21837	Mogul screw socket		65	19.27
21791	8 x 16 in. diffusing ball (with 6 in.			
	top fitter)	20	19	8.19
21792	Ventilator, with 6 in. fitter	20	9	5.04

#### COMMERCE BRACKETS

A massive fixture of distinctly artistic and classical design. Particularly adapted for lighting fronts of fine structures, such

as banks and office buildings, clubs, libraries, etc.

Wall plate, 9 inches wide, 20 inches high. Distance from
wall to center of top globe, 14 inches. Height to bottom of
globe of 1 light bracket, 33 inches; to bottom of center globe of
3 and 4 light brackets, 41 inches. Distance from center to center of opposite globe, 30 inches.

For side lamps use 6 x 9 inch or 6 x 10 inch globe. For center

lamps use 6 x 12 inch or 6 x 14 inch globe.

Prices below do not include lamps, globes, ventilators or wiring. Medium screw sockets are furnished for side lamps, Mogul screw sockets for center lamps, unless otherwise specified.

21838 1 light	20	90	\$25.20
21839 3 light	20	145	37.80
21840 4 light	20	155	40.95
21830 6 x 9 in. diffusing ball	20	6	2.20
21842 6 x 10 in. diffusing ball		7	2.52
21831 6 x 12 in. diffusing ball (without top			
fitter)	20	8	3.15
22476 6 x 12 in. diffusing ball (with 6 in.			
top fitter)	20	8	3.15
22480 6 x 14 in. diffusing ball (with 6 in.			
top fitter)	20	9	4.41
21792 6 in. ventilator	20	9	5.04
		•	0.0

#### CORRIDOR BRACKETS

Distance from wall to center of globe of the 1 light bracket, 10 inches. Distance from center to center of opposite globes of the 3 light bracket, 16 inches. Height over all, 40 inches. Globe holders have 6 inch fitters for 6 x 8 inch side globes and 6 x 10 inch center globes.

Prices below include globe holders and medium screw sockets, but not the globes or wiring.

- CO - CO - CO - CO - CO - CO - CO - CO	AL.	21245	1 light	20	65	\$18.90
-		21246	3 light	20	110	26.46
	Y	21247	4 light	20	135	30.24
Light Corridor	1 Light Corridor	21841	6 x 8 in. diffusing ball	20	<b>⊤</b> 5	1.89
Bracket	Bracket	21842	6 x 10 in. diffusing ballgitized by	20	Q[C	${f 2}$ . ${f 52}$
Delivery F. O. 1	B. Factory, South I		For warehouse deliveries write near			

For warehouse deliveries write nearest house.

#### INSULATING MATERIALS

Western Electric

#### Insulating Tapes

#### VICTOR TAPES

These are commercial grades of tape which we furnish regularly in half-pound rolls, ¼ inch wide. This weight sometimes varies, but very slightly. We furnish under this same brand both a friction tape and a rubber splicing compound. Therefore it is always necessary to specify whether friction tape or splicing compound is desired. The standard width of all tapes is 1/4 inch, but on special orders we can furnish the Victor friction tape either 1/2 inch, 1 inch, 11/4 inches, 11/2 inches or 2 inches



VICTOR FRICTION T	APE	VICTOR SPLICING COMP	OUND
Description I	List Price	Description Li	ist Price
¼ in. Black Tape, per lb ¼ in. Black Tape, per 50 lb.	\$1.00	34 in. Rubber Tape, per lb. 34 in. Rubber Tape, per 50	\$1.60
case	30.00	lb. case	<b>55.00</b>
lb. box	<b>5</b> 6.00	lb. box	90.00

Note: Victor Splicing Compound, ¾ inch wide, 35 mils thick, in ½ lb. rolls, contains 50 to 55 feet per lb. packed in foil and cartons. Shipped. 100 lbs. in wood case and 50 lbs. in fiber case.

#### **AMAZON TAPES**

These tapes are of excellent quality and meet the requirements of those desiring something better than a regular commercial product. The price is accordingly somewhat higher than our Victor tapes.



#### AMAZON FRICTION TAPE AMAZON SPLICING COMPOUND

Description I		
1/2 in, Black Tape, per lb	\$1.30	3/4 in. Rubber Tape, per lb. \$2.00
in. Black Tape, per 50 lb.		34 in. Rubber Tape, per lb. \$2.00 34 in. Rubber Tape, per 50
Case	42.00	lb. case
34 in. Black Tape, per 100		¾ in. Rubber Tape, per 100
lb. box	80.00	lb. box 120 . 00

Note: Amazon Splicing Compound, 3/4 inch wide, 40 mils thick, in 1/2 lb. rolls, contains 40 to 45 feet per lb. packed in foil and cartons. Shipped, 100 lbs. in wood case and 50 lbs. in fiber case.

#### **WESTERN ELECTRIC "S" TAPE**

This tape is made of the highest quality material. The sheeting is of select stock and is well impregnated by calendar coats of green friction, and on top of these is spread a high grade green compound, making the tape as high if not higher, in resistance to leakage, than any other on the market. It has exceptionally long life, good fiber, high dielectric and tensile strength. It will be wound on the Western Electric blue core, 8 oz. net to the 3/4 inch width, 1/2 lb. roll packed in tinfoil.



460011

	st Price
14 in. Western Electric "S" Tape (Standard Case, 25 lbs), per lb	\$1.40
¾ in. Western Electric "S" Tape, per 50 lbs	47.00
in. Western Electric "S" tape, per 100 lbs	88.00

	GRIMSHAW TAI	PES	I		OKONITE TAP	ES			
	34 inch, 1/2 lb. Ro	lls	1		34 inch, 1/2 lb. Ro				
List		Lis	t Price	List		Lis	st Price		
No.	Description	per lb.	per 100 lbs.	No.	Description	per lb.	per 100 lbs.		
460004	Black Friction	\$2.30	\$150.00	460007	Manson Black Friction.	\$1.80	\$100.00		
460005	White Friction	2.30	150.00	460008	Manson White Friction.	1.80	100.00		
460006	Splicing Compound	2.50	170.00	460009	Okonite Splicing Comp.	2.50	160.00		
	P. & B. TAPE								
	% inch ¼ lh. Rolls								

COMPETITION FRICTION TAPE 1/2 inch, 1/2 lb. Rolls

Black Weatherproof.....

List Price

per lb. per 100 lbs. 460012 Black Friction..... \$1.50

COMPETITION SPLICING COMPOUND

......\$1.30 \$60.00

1/2 inch, 1/2 lb. Rolls List Price

r 100 lbs. | s88.00 | 460013 | Competition Rubber... \$2.40 | \$150.00 Insulating and Soldering Materials

#### Western Electric

#### SOLDERING ACCESSORIES









Western-Electric Soldering Paste

This is a superior quality of soldering paste. It will not corrode or injure in any way the material that is to be soldered. It takes the place of injurious acids and is equally effective. It may be applied with a rag, a stick or even with the fingers. It is particularly intended for those who prefer a soldering flux in paste form rather than the soldering stick, and in cases where it is inconvenient to heat the joint in order to apply the stick flux.

		-List Price	Each-	
List No. 460016 460017	2-oz. tin cans	.70	12 to 36 \$0.28 .42 let Prices Each	36 and Over \$0.22 .36
460018 460019 460020	1/2 lb. tin cans	\$1.10 1.80	5 to 100 lbs. \$0.70 1.30 6.00	100 lbs. and Over \$0.60 1.10 5.20



460039

#### Tube Flux

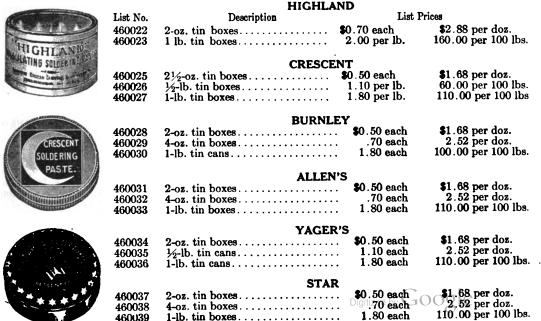
A soldering flux, not a substitute for solder. A non-corrosive soldering flux put up in convenient form.

The spout in the tube is aluminum and allows the paste to be applied directly to the joint at the same time with the heat without soldering up the vent. This is an important feature.

List No. Tube Flux..... Description 

\$0.40 each \$2.88 per doz.

#### Miscellaneous Soldering Paste



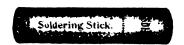
1-lb. tin boxes.....

















Our soldering salt combines in soluble crystal form the most efficient soldering agents known to chemistry. It dissolves readily in water and does not give off any obnoxious odors or gases. Directions for dissolving in water to make a soldering agent of proper strength are included with each package.

List No.	Description	List Price		
	Western-Electric	Each pe	or 100 Lbs.	
460040	½-lb. cans	\$1.10	\$60.00	
460041	1-lb. cans	1.80	110.00	
	Yager's			
460043	½-lb. bottles	\$1.10	\$60.00	
460044	1-lb. bottles	1.80	112.00	
460045	5-lb. bottles	4.00	180.00	
	Allen's			
460046	½-lb. bottles	\$1.10	\$60.00	
460047	1-lb. bottles	1.80	110.00	
460048	5-lb. bottles	4.00	180.00	
	Crescent			
460049	½-lb. bottles	\$1.10	\$60.00	
460050	1-lb. bottles	1.80	110.00	

#### Western-Electric Soldering Stick

This soldering stick is made under the same formula as our paste and put up in a neat substantial package. Its use is very convenient as it can be carelessly carried in the workman's tool kit or pocket. To apply this stick it is only necessary to heat the joint to be soldered and rub it with the bared end of the stick.

		List I	rice
List No.	<b>Description</b>	Each	per Doz.
460052	Western-Electric Soldering Stick	\$0.50	\$1.68

#### Miscellaneous Soldering Sticks

		List Price			
List No.	Description	Each	per Doz.		
460053	Crescent	\$0.50	\$1.68		
460054	Star	. 50	1.68		
460055	Allen's		1.68		
460056	Yager's	. 50	1.68		

#### Solderall

A complete solder, and non-corrosive fluid. Combined in paste form and put up in convenient collapsible tubes.

		Lis	t Price
List No.	Description	Each	per Doz.
460058	Solderall	\$1.00	\$10.00

#### Bar and Wire Solder

List Price

List No.			per Lb.
460060 460061	Strictly Half and Half Strictly Half and Half	Bar Solder ) Wire Solder )	Prices on application

#### W.-E. Resin Core Solder

460065	Resin Core Solder in ½-lb. boxes	Prices on application
460066	Resin Core Solder, on 10-lb, spools	

#### Cable Solder og e

#### CENTRAL STATION SUPPLIES



#### Trotter's Commutator Compound

This compound is an article of merit. Particularly adapted as a lubricant for carbon or woven wire, dynamo or motor brushes. A very small application required.

		Li	st Price
List No.		Each	per Doz.
460068	Small size sticks 4½ x 5% ins	<b>\$</b> 0.60	<b>\$</b> 2.52
460069	Large size sticks $4\frac{1}{2}$ x $\frac{7}{8}$ ins	1.10	4.56



#### Allen's Commutator Lubricant

Commutator Cement NOC (TE) MANY rice \$2.00

The Allen Commutator Lubricant contains no acid or destructive ingredient; is made of pure chemicals, and can be safely used on dynamos generating high potentials. Whenever cutting, heating, sparking, or wearing of the commutator is noticed, a very slight application of the Allen Commutator Lubricant to the revolving surface of the commutator will restore a normal working condition and give a "bright, clean face."

	,	143	0 T 11C0
List No.		Each	per Doz.
460070	Allen's Commutator Lubricant	<b>\$</b> 0.60	<b>\$</b> 2.70

#### Early's Commutator Cement

		Lis	t Price
List No.		Each	per Doz.
461002	Small size, $2\frac{1}{2} \times 5\frac{3}{4}$ , weight 1 lb	<b>\$4</b> .00	<b>\$</b> 16.80
461003	Large size, $5 \times 10\frac{1}{2}$ , weight 7 lbs	18.00	84.00

#### **Emery Cloth**

#### Sheets 9 x 11 inches

List No. Mfr. No.	Weight Ream	Reams in Bundle	List Price per Quire	List No.	Mfr. No.	Weight Ream	Reams in Bundle	List Price per Quire
460072 Crocus 460073 00 460074 0 460075 ½	30 lbs. 32 lbs. 34 lbs. 41 lbs.	2½ 2½ 2½ 2½ 2½	\$5.98 5.98 5.98 5.98	460076 460077 460078	1 1½ 2 2½	45 lbs. 47 lbs. 52 lbs. 75 lbs.	2 2 2 2 1½	\$5.08 5.20 5.40 <b>5.</b> 58

### **Emery Paper**

#### Sheets 9 x 11 inches

List No.	Mfr. No.	Weight Ream	Reams in Bundle	List Price per Quire	List No.	Mfr. No.	Weight Ream	Reams in Bundle	List Price per Quire
460080	00	19 lbs.	5	<b>\$</b> 3.80	460084	11/2	33 lbs.	3	<b>\$</b> 3.96
460081	Ō	20 lbs.	5	3.80	460085	2	37 lbs.	21/2	4.06
460082	1/2	26 lbs.	5	3.80	460086	$2\frac{1}{2}$	40 lbs.	2	4.16
480083	1	31 lbs	4	3.90					

#### Sand Paper—First Quality

#### Sheets 9 x 11 inches

List No. 460087 460088 460089 460090 460091	Mfr. No. 00 0 1/2 1 11/2	Weight Ream 15 lbs. 17 lbs. 20 lbs. 24 lbs. 27 lbs.	Reams in Bundle 5 5 4 3	List Price per Quire \$3.80 3.80 3.90 3.96	List No. 460092 460093 460094 460095	Mfr. No. 2 21/2 3 31/2	Weight Ream 37 lbs. 43 lbs. 50 lbs. 28 lbs.	Reams in Bundle 2 2 11/2 11/2	List Price per Quire \$4.04 4.12 4.26 4.44
					5	In	sulating an	d Soldering	Materials

#### INSULATING MATERIAL

#### Cotton Sleeving

Cotton Sleeving is used for insulating and protecting armature coils. It is regularly furnished in white, but can be supplied in red, blue, or black at a small additional cost.

		Yards	List Price			Yards	List Price
List No.	For Wires	per Lb.	per Lb.	List No.	For Wires	per Lb.	per Lb.
1	11-12-13	230	\$2.30	8	1-2	65	\$2.30
2	7-8-9	180	2.30	9	1-2	95	2.70
3	9-10	175	2.60	10	1-0	65	2.20
4	5-6-7	225	2.70	11	1-0	65	2.50
5	5	100	2.30	12	2-No. 0	50	2.90
6	3-4	135	2.60	13	6-7	150	2.70
7	3-4	120	2.50				

Put up in 10 lb. units and special 5 and 1 lb. units.

#### Plain Linen Tape

This is a good quality of calendered linen tape without friction or insulating compound. It is regularly furnished in rolls containing 36 lineal yards or will be furnished in other lengths when desired.

	Width	Thickness	Yards	List Price	!	Width	Thickness	Yards	List Price
List No.	Ins.	Ins.	per Roll	Gr.Yds.	List No.	Ins.	Ins.	per Roll	Gr.Yds.
11820	3/4	.007	72	\$1,40	8843	5∕8	.005	72	\$1.60
14002	1	.007	72	1.70	7703	×	.005	<b>72</b>	1.90
10470	1/4	.005	<b>3</b> 6	1.10	9298	<b>%</b>	.005	72	2.00
8769	3/8	.005	<b>3</b> 6	1.30	8844	1	.005	72	2.20
8841	36	.005	36	1.40					

#### Extra Quality Linen Tape

A similar tape to that described above, but of extra fine quality and close texture. It is also regularly furnished in rolls containing 36 lineal yards, but will be furnished in other lengths when desired.

List No. 4826 3737	Width Ins.	Thickness Ins. .007	Yards per Roll 72 36	List Price Gr.Yds. \$1.70 2.00	List No. 4896 10535	Width Ins.	Thickness Ins007	Yards per Roll 72 72	List Price Gr.Yds. \$3.00 3.70
3737 4308	5/8 3/	.007	36 36 and 72	2.00	10535	1	.007	72	3.70

No. 4308 can be furnished in varied winds if ordered in lots of 25 gross yards or more of a pattern.

#### Standard Linen Tape

Is superior in quality to plain linen but not equal to extra quality, as it is not as closely woven and possesses somewhat less potential strength.

	Width	Thickness	Yards	List Price		Width	Thickness	Yards	List Price
List No.	Ins.	Ins.	per Roll	Gr.Yds.		Ins.	Ins.	per Roll	Gr.Yds.
13870	<b>¾</b>	.007	36	\$1.70	13871	1	.007	36	<b>\$2</b> .00

#### Star Cotton Tape or Webbing

A plain cotton tape of good quality without compound. It is furnished regularly in rolls containing 36 lineal yards or will be furnished in other lengths when desired.

	Width	Thickness	Yards	List Price	1	Width	Thickness	Yards	List Price
List No.	Ins.	Ins.	per Roll	Gr.Yds.	List No.	Ins.	Ins.	per Roll	Gr.Yds.
5918	3/2	.013	36	\$1.30	5906	1	.013	· 36	\$2.20
5821	1/8	.013	36	1.60	9562	11/2	.013	72	3.30
5727	3/4	.013	36	1.90				-	

#### Standard Cotton Tape or Webbing

A similar tape to that described above, but of extra fine quality and close texture. It is also regularly furnished in rolls containing 36 lineal yards or will be furnished in other lengths when desired.

List No. 4254 3736	Width Ins. 1/2	Thickness Ins. .013 .013	Yards per Roll 1000 72	List Price   Gr.Yds. \$1.60 2.40	List No. 13100	Width Ins.	Thickness Ins013 gitized by	Yards per Roll 36	List Price Gr.Yds. \$3.10
Insulating	and Sold	oring Materia	ıla	0	<b>)</b>		9.11.200 0)		

#### **BINDING TAPES**

#### Stay Binding or Webbing

This is a plain cotton webbing somewhat heavier and stronger than the ordinary cotton tape. It is used largely for field coil winding. Furnished in rolls containing 72 lineal yards. Made in two weights as listed below:

	•	Regular					Heavy		
List No. 6291 6290	Width Inches 1 114	Thickness Inches .013 .013	Yards per Roll 36 36	List Price Gr. Yds. \$3.10 3.70	List No. 8730 9982	Width Inches 1	Thickness Inches .019 .019	Yards per Roll 72 72	List Price Gr. Yds. \$3.20 4.00
6289	11/2	.013	36	4.30	1613 9999	$\frac{11}{2}$	.019 .019	72 36	4.60 7.20

#### Surgical Web Tape

Surgical Web is a superior grade of stay binding, closely woven, herringbone weave, and possesses considerable tensile strength.

	Extra Quality											
List No.	Width Inches	Thickness Inches	Yards per Roll	List Price Gr. Yds.	List No.	Width Inches	Thickness Inches	Yards per Roll	List Price Gr. Yds.			
7699	1/2	.022	36	\$2.60	8870	11/2	.022	36	<b>\$6.50</b>			
5281	3/4	.022	36	3.50	9058	2	.022	36	8.70			
5224	1	.022	<b>3</b> 6	4.40	10449	21/4	.022	36	10.30			
5298	11/4	.022	36	5.40	J							

#### Non-Elastic Webbing

Non-Elastic Web is a good quality stay binding which is suitable for general use.

List	Width	Thickness	Yards	List Price	List	Width	Thickness	Yards	List Price
No.	Inches	Inches	per Roll	Gr. Yds.	No.	Inches	Inches	per Rolls	Gr. Yds.
4092	1/2	.030	36	<b>\$</b> 3.10	4096	11/4	.030	36	<b>\$</b> 5.30
4094	3/4	.030	<b>3</b> 6	3.80	3940	$1\frac{1}{2}$	.030	36	6.30
10177	<b>₹</b>	.030	<b>36</b>	4.30	4098	2	.030	<b>72</b>	8.70
3862	1	.030	36	4.60					

#### Plain Silk Tape

Silk Tape is used for general insulating purposes, particularly when the available space is extremely limited. It is furnished in rolls containing 36 lineal yards, in black, white and colors. Unless otherwise specified, white tape will always be furnished.

Li <b>st</b> No.	Width Inches	Thickness Inches	Yards per Roll	List Price Gr. Yds.	List No.	Width Inches	Thickness Inches	Yards per Roll	List Price Gr. Yds.
15841	1/4	.006	1000	\$3.10	12519	5/8	.006	72	<b>\$5.90</b>
128 <b>21</b>	3/8	.006	1000	3.80	14734	3/4	.006	72	6.90
11216	18	.006	<b>7</b> 2	4.40	1629 <b>9</b>	1	.006	<b>72</b>	<b>8</b> .80
16604	1,6	.006	72	4.90					

#### Varnished Tape

#### Also Known as Linotape or Oiled Linen Tape

An electrical insulating tape extensively used in coil winding, cable splicing and other high tension work, having high insulating and moisture resisting qualities. The coating consists of films of oxidized linseed oil, and is furnished straight or bias cut, in rolls containing 72 lineal yards, each roll coated with paraffine to exclude moisture.

•	-List Price per	144 Yds.—	List Price per 144 Yds.					
	No. 10-L	No. 10-B		No. 10-L	No. 10-B			
Width	Cut Straight	Cut Bias	Width	Cut Straight .	Cut Bias			
5/8"	\$1.62	\$1.90	2 "	<b>\$4</b> .60	<b>\$5</b> .68			
3/4"	1.90	2.16	2¼″ <b></b>	5.14	6.22			
1'"		2.88	21/2"	5.68	6.92			
11/4"		3.52			7.56			
1½"		4.32	3	7.02	8.38			
13/"		4.86						

Note: The thickness is .010 in. Approximate weight 1 in. wide, 2½ lbs. per gro. yds. Unless otherwise specified, biased tape will be furnished. Can be furnished .007 in. or .012 in. thick.

#### **VULCANIZED FIBER**

Sheet Fiber

RED, GRAY OR BLACK

Special Colors One Cent per Pound Extra

Approximate size of sheets .005 to .120 inch thick, 48 x 80 inches.

14 to 2 inch thick, 44 x 70 inches.

15 to 2 inch thick, 46 x 76 inches.

Manufacturer's List Special Discounts on Application

		Approx.	List			Approx.	List			Approx.	List
List	Thickness	Lbs.	Price	List	Thickness		Price	List	Thickness		Price
No.	Inches	per Sheet	per Lb.	No.	Inches	per Sheet	per Lb.	No.	Inches	per Sheet	per Lb.
460962	.005	2	\$0.60	460969	.075	11	\$0.35	460371	₹8	138	\$0.49
460963	.010	2	.50	460970	.100	15	.35	460372	1	155	. 56
460357	.015 (삶)	21/2	.40	460362	⅓	20	.35	460373	11/2	165	. 70
460964	.020	4	. 35	460363	14	30	. 36	460971	11/2	195	. 85
460965	.025	41/2	.35	460364	. 1/4	40	. 36	460972	13%	215	1.05
460359	.030 (닭)	5	. 35	460365	*	50	. 36	460973	11/2	235	1.30
460966	.035	6	.35	460366	3/6	60	. 36	460974	15%	255	1.60
460967	.040	71/2	. 35	460368	3/2	80	.38	460975	13/4	275	2.10
460968	.045 (🚓)	8	. 35	460369	5/R	100	.41	460976	1 7/8	295	3.10
460360	.060	10	. 35	460370	<b>¾</b>	120	.44	460980	2	315	4.10

#### Hard Vulcanized Fiber Rods

COLORS, RED, BLACK AND GRAY

Manufacturer's List Special Discounts on Application											
List	Diameter	No. Ft.	List Price	List	Diameter		List Price	List	Diameter	No. Ft.	List Price
No.	in Ins.	per Lb.	per Ft.	No.	in Ins.	per Lb.	per Ft.	No.	per Lb.	in Ins.	per Ft.
461048	*	241.43	\$0.15	461383	5/6	5.43	\$0.40	460390	136	1.12	\$5.00
461049	1/4	135.80	.15	461384	. H	4.49	. 50	461391	11/2	.943	8.00
460376	Æ	60.36	.15	461385	<b>%</b>	3.77	. 65	461392	156	.803	10.00
461377	¥.	33.95	. 15	460977	· #	3.22	.80	461393	13/	. 693	15.00
461378	¥	21.73	.16	460386	7	2.77	1.00	460979	172	.604	25.00
461379	<i>'</i>	15.09	.18	460978	ii.	2.42	1.25	460394	2′°	. 530	35.00
461380	í,	11.09	. 22	460387	1.0	2.12	2.00	461059	21/4	.420	45.00
461381	1%	8.49	.28	460389	13%	1.68	3.00	461060	212	.340	60.00
461382	<b>4</b>	6.71	.35	461054	11/2	1.36	4.00		-/-		

Intermediate sizes at price of next larger size.

Rods turned from glued up stock 1½ inch diameter and over will take one half the list price of rods from solid stock.

	F	IBER T	UBING	
Manufacturer's	List	Special	Discounts	on

Manufacturer's List Special Discounts on Application  Thickness of Wall											
Diam.	\$0.20	\$0.30	\$0.40		**	nickness of	W B.II	**		11	3/8
**************************************	.20	.30	.40								
1/4	. 10	. 14	. 18	.22	. 26					• • • •	
₹6.	. 10	. 15	. 19	. 24	. 28						
<b>¾</b>	.11	. 16	.21	.26	.31						
र्ष	.11	. 17	.22	.28	.33		• • • • • • • • • • • • • • • • • • • •	• • • • •	· · · · ·	• • • • •	• • • • •
73	.12 .13	.18 .20	.24 .26	.30 .32	.36 .39	.42 .46	.48	• • • • •	• • • • •	• • • • •	• • • • •
13	.13	.21	.28	.35	.42	.49	. 52 . 56		• • • • •		• • • • •
æ	.15	.23	.30	.37	.45	.52	.60	• • • • •			• • • • •
V.	.16	.24	.32	.40	.48	.56	.64				
í.	. 17	.26	.34	.42	.51	.60	.68				
1/4	.18	. 27	.36	.45	. 54	.63	.72				
Ή	. 19	. 29	.38	.47	.57	.66	.76				
1	. 20	. 30	.40	. 50	. 60	.70	.80				
11/4	.22	.33	.44	. 55	.66	.77	.88				
114	. 24	. 36	.48	. 60	.72	.84	.96				
1%	. 26	. 39	.52	. 65	.78	.91	1.04		• • • • •	• • • • •	• • • • •
123	. 28 . 30	.42 .45	. 56 . <b>60</b>	.70 .75	.84 .90	.98 1.05	1.12 1.20		• • • • •	• • • • •	• • • • •
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.32	.48	.64	.80	.96	1.12	1.28	• • • • •	• • • • •	• • • • •	• • • • •
172	.34	.51	.68	.85	1.02	1.19	1.36	• • • • •	• • • • •	• • • • •	
2 8	.36	.54	.72	.90	1.08	1.26	1.44	\$1.62	\$1.80		
21/8	.38	.57	.76	.95	1.14	1.33	1.52	1.71	1.90		
234	.40	.60	.80	1.00	1.20	1.40	1.60	1.80	2.00		
23%	.42	. 63	.84	1.05	1.26	1.47	1.68	1.89	2.10		
21/2	.44	. 66	.88	1.10	1.32	1.54	1.76	1.98	2.20		
25/8	. 46	. 69	.92	1.15	1.38	1.61	1.84	2.07	2.30		
234	.48	.72	. 96	1.20	1.44	1.68	1.92	2.16	2.40	• • • •	• • • • •
21/8	. 50	.75	1.00	$\frac{1.25}{1.30}$	1.50	1.75	2.00	2.25	2.50	•0.00	63.10
3 31/8	. 52 . 54	.78 .81	1.04 1.08	1.35	1.56 1.62	1.82 1.89	2.08 2.16	$2.34 \\ 2.43$	2.60 2.70	\$2.86 2.97	\$3.12 3.24
314	.56	.84	1.12	1.40	1.68	1.96	2.24	2.52	2.80	3.08	3.36
33%	.58	.87	1.16	1.45	1.74	2.03	2.32	2.61	2.90	3.19	3.48
31/2	.60	.90	1.20	1.50	1.80	2.10	2.40	2.70	3.00	3.30	3.60
35/2	. 62	.93	1.24	1.55	1.86	2.17	2.48	2.79	3.10	3.41	3.72
334	. 64	.96	1.28	1.60	1.92	2.24	2.56	2.88	3.20	3.52	3.84
3⅓	. 66	. 99	1.32	1.65	1.98	2.31	2.64	2.97	3.30	3.63	3.96
4.,	. 68	1.02	1.36	1.70	2.04	2.38	2.72	3.06	3.40	3.74	4.08
41/8	.70	1.05	1.40	1.75	2.10	2.45	2.80	3.15	3.50	3.85	4.20 4.32
414	.72	1.08 1.11	1.44 1.48	1.80	2.16 2.22	2.52	2.88	3.24 3.33	3.60 3.70	3.96 4.07	4.44
43%	.74 .76	1.11	1.48	1.85 1.90	2.22	2.59 2.66	$2.96 \\ 3.04$	3.33 3.42	3.70	4.18	4.56
4 1/2 4 5/8	.78	1.17	1.56	1.95	2.34	2.73	3.12	3.51	3.90	4.29	4.68
4%	.80	1.20	1.60	2.00	2.40	2.80	3.20	3.60	4.00	4.40	4.80
4 1/2	.82	1.23	1.64	2.05	2.46	2.87	3.28	3.69	4.10	4.51	4.92
5	.84	1.26	1.68	2.05 2.10	2.52	2.94	3.36	3.78	4.20	4.62	5.04
51/8	.86	1.29	1.72	2.15	2.58	3.01	3.44	3.87	4.30	4.73	5.16
5 1/4	.88	1.32	1.76	2.20	2.64	3.08	3.52	3.96	4.40	4.84	5.28
53/8	.90	1.35	1.80	2.25	2.70	3.15	3.60	4.05	4.50	4.95	5.40
514	.92	1.38	1.84	2.30	2.76	3.22	3.68	4.14	4.60	5.06	5.52
556	.94	1.41	1.88	2.35	2.82	3.29	3.76	4.23	4.70	5.17	5. <b>64</b> 5.76
5% 5%	.96 .98	1.44 1.47	1.92 1.96	$\frac{2.40}{2.45}$	2.88 2.94	3.36 3.43	3.84 3.92	4.32	4.80	5.28 5.39	5.76 5.88
8	1.00	1.50	2.00	2.45 2.50	2.94 3.00	3.43 8.50	4.00	D <b>igital</b> ed	by (5.00) (	5.50	6.00
							1.00	3.00	0.00	O. 00	3.00
Insula	ting and	Solderind	Materials	1	1.	n.					

#### **ELECTRICAL INSULATING MICA**

#### INDIA AND AMBER

#### Cut Mica

Size	List Price per Lb.	Size	List Price per Lb.	Size	List Price per Lb.	Size	List Price per Lb.	Size	List Price per Lb.
1 x 3 1 x 4 1 x 4½	\$3.00 5.00 5.50	1¼ x 9 1¼ x 10 1¼ x 11	\$13.50 15.25 15.50	134 x 5½ 134 x 6 134 x 6½	\$9.50 10.00 10.25	2 x 11 2 x 12 2½ x 2½	\$16.25 17.00 4.50	2½ x 6 2½ x 6½ 2½ x 7	\$11.00 11.50 11.50
1 x 5 1 x 5½ 1 x 6	7.50 8.00 8.50	$ \begin{array}{c cccc} 1 & 1 & 1 & 1 & 2 \\ 1 & 1 & 2 & 2 & 2 \\ 1 & 2 & 2 & 2 & 2 \end{array} $	16.25 3.00 3.25	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	10.75 11.25 11.75	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	4.75 6.25 6.50	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	12.00 12.50 13.00
1 x 6½ 1 x 7 1 x 7½ 1 x 8	9.50 10.00 10.50 11.00	1½ x 3 1½ x 3½ 1½ x 4 1½ x 4½	3.50 4.00 6.00 6.50	134 x 8½ 134 x 9 134 x 10 134 x 11	12.25 14.00 15.75 16.00	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	7.50 8.25 9.50 10.00	$ \begin{array}{c cccc} 2\frac{1}{2} \times 9 \\ 2\frac{1}{2} \times 10 \\ 2\frac{1}{2} \times 11 \\ 2\frac{1}{2} \times 12 \end{array} $	14.75 16.50 16.75 17.50
1 x 8½ 1 x 9 1 x 10	11.50 13.25 15.00	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	8.50 9.00 9.25	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	16.75 4.00 4.25	$2\frac{1}{4} \times 6$ $2\frac{1}{4} \times 6\frac{1}{2}$ $2\frac{1}{4} \times 7$	10.50 11.00 11.25	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	7.00 7.75 8.50
1 x 11 1 x 12 1 ½ x 3 1 ½ x 3 ½	15.25 16.00 3.25 3.50	1½ x 6½ 1½ x 7 1½ x 7½ 1½ x 8	10.00 10.50 11.00 11.50	2 x 3 2 x 3½ 2 x 4 2 x 4½	6.00 6.25 7.00 8.00	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	11.75 12.25 12.75 14.50	$ \begin{vmatrix} 2\frac{3}{4} \times 4\frac{1}{2} \\ 2\frac{3}{4} \times 5 \\ 2\frac{3}{4} \times 5\frac{1}{2} \\ 2\frac{3}{4} \times 6 \end{vmatrix} $	9.00 10.50 11.00 11.50
1¼ x 4 1¼ x 4½ 1¼ x 5 1¼ x 5½	5.50 6.25 8.00 8.50	1½ x 8½ 1½ x 9 1½ x 10 1½ x 11	12.00 13.75 15.50 15.75	2 x 5 2 x 5½ 2 x 6 2 x 6½	9.25 9.75 10.25 10.50	$\begin{array}{c} 2\frac{1}{4} \times 10 \\ 2\frac{1}{4} \times 11 \\ 2\frac{1}{4} \times 12 \\ 2\frac{1}{2} \times 2\frac{1}{2} \end{array}$	16.25 16.50 17.25 6.00	234 x 61/2 23/4 x 7 23/4 x 8 23/4 x 9	11.50 11.75 13.00 15.00
1¼ x 6 1¼ x 6½ 1¼ x 7	9.00 9.75 10.25	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	16.50 4.50 6.00	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	11.00 11.50 12.00	2½ x 3 2½ x 3½ 2½ x 4	6.50 7.00 8.00	$ \begin{array}{c c} 2\frac{3}{4} \times 10 \\ 2\frac{3}{4} \times 11 \\ 2\frac{3}{4} \times 12 \end{array} $	16.75 17.00 17.75
1¼ x 7½ 1¼ x 8 1¼ x 8½	10.75 11.25 11.75	134 x 4 134 x 4½ 134 x 5	6.50 7.50 8.75	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	12.50 14.25 16.00	2½ x 4½ 2½ x 5 2½ x 5½	8.50 10.00 10.50	3 x 3 3 x 3½ 3 x 4	7.50 8.75 9.50

Size	List Price per Lb.	Size	List Price per Lb.	Size	List Price per Lb.	Size	List Price per Lb.
3 x 4½ 3 x 5 3 x 5½ 3 x 6 3 x 6½ 3 x 7	<b>\$</b> 9.75	$3\frac{1}{2} \times 3\frac{1}{2}$	<b>\$</b> 9.25	4 x 12	\$18.50	5½ x 6½	\$15.50
3 x 5	11.00	3½ x 4	10.00	$4\frac{1}{2} \times 4\frac{1}{2}$	11.50	$5\frac{1}{2} \times 7$	16.50
$3 \times 5\frac{1}{2}$	11.50	$3\frac{1}{2} \times 4\frac{1}{2}$	10.50	$4\frac{1}{2} \times 5$	12.00	$5\frac{1}{2} \times 8$	16.75
3 x 6	12.00	$3\frac{1}{2} \times 5$	11.25	4½ x 5½	12.50	5½ x 9	17.00
$3 \times 6\frac{1}{2}$	12.50	$3\frac{1}{2} \times 5\frac{1}{2}$	11.75	$4\frac{1}{2} \times 6$	13.50	5½ x 10	18.00
3 x 7	13.00	3½ x 6	12.50	$4\frac{1}{2} \times 6\frac{1}{2}$	14.00	5½ x 11	18.25
3 x 8	13.50	$3\frac{1}{2} \times 6\frac{1}{2}$	13.00	$4\frac{1}{2} \times 7$	14.50	$5\frac{1}{2} \times 12$	19.25
3 x 9	15.25	$3\frac{1}{2} \times 7$	13.50	4½ x 8	15.00	6 x 6	16.00
3 x 10	17.00	$3\frac{1}{2} \times 8$	13.75	$4\frac{1}{2} \times 9$	15.75	6 x 61/2	16.25
3 x 8 3 x 9 3 x 10 3 x 11 3 x 12	17.25	$3\frac{1}{2} \times 9$	15. <b>25</b>	$4\frac{1}{2} \times 10$	17.50	6 x 7	17.00
	18.00	$3\frac{1}{2} \times 10$	17.00	4½ x 11	17.75	6 x 8	17.50
$3\frac{1}{4} \times 3\frac{1}{4}$	9.00	$3\frac{1}{2} \times 11$	17.25	$4\frac{1}{2} \times 12$	18.75	6 x 9	18.00
$3\frac{1}{4} \times 3\frac{1}{2}$	9.50	$3\frac{1}{2} \times 12$	18.25	5 x 5 5 x 5½ 5 x 6 5 x 6½ 5 x 7 5 x 8	13.50	6 x 10	21.50
314 x 4	10.00	4 x 4	10.50	$5 \times 5\frac{1}{2}$	14.00	6 x 11	22.50
31/4 x 41/2	10.50	4 x 4½ 4 x 5 4 x 5½	11.00	5 x 6	14.50	6 x 12	23.50
314 x 5	11.50	4 x 5	11.50	5 x 6½	15.00	7 x 7	18.00
$3\frac{1}{4} \times 5\frac{1}{2}$	12.00	$4 \times 5\frac{1}{2}$	12.00	5 x 7	15.50	7 x 8	18.50
$3\frac{1}{4} \times 6$	12.50	4 x 6 4 x 6½	13.00	5 x 8	16.00	7 x 9	19.00
$3\frac{1}{4} \times 6\frac{1}{2}$	13.00	$4 \times 6\frac{1}{2}$	13.50	5 x 9	16.25	7 x 10	22.50
$3\frac{1}{4} \times 7$	13.50	4 x 7	14.00	5 x 10	17.75	7 x 11	23.50
$3\frac{1}{4} \times 8$	13.75	<b>4 x 8</b> ∫	14.25	5 x 11	18.00	7 x 12	25.50
$3\frac{1}{4} \times 9$	15.50	4 x 9	15.50	5 x 12	19.00	8 x 8	19.50
$3\frac{1}{4} \times 10$	17.25	4 x 10	17.25	$5\frac{1}{2} \times 5\frac{1}{2}$	14.25	8 x 9	20.00
$3\frac{1}{4} \times 11$	17.50	4 x11	17.50	5½ x 6	15.00	8 x 10	23.50
3½ x 12	18.25			1	!	1	<u> </u>

Special sizes will be cut to order and will take the list price of the next larger size.

For Uncut India or Amber Mica, see following page.

#### INSULATING MATERIAL

#### Hard Rubber Sheets

Grade No. 1001. Black hard rubber sheet, designed for thin sheets only. Dimensions,  $20 \times 48$  inches or  $20 \times 24$  and  $20 \times 12$  inches. Thickness, .014 inch to .047 inch inclusive.

Grade No. 1010. Black hard rubber sheet. Medium quality of sheet designed for miscellaneous uses. Standard dimensions, trimmed, 24 x 48 inches. Thickness, .046 inch to 1.50 inch.

List No.	Thickness	Grade No.	Net Prices   per Lb.	List No.	Thickness	Grade No.	Net Prices per Lb.
460981 460850 460851 460852 460854 460855 460856 460857 460858	tin. tin. tin. tin. tin. tin. tin. tin.	1001 1001 1010 1010 1010 1010 1010 101	\$4.50 3.80 3.10 3.00 3.00 3.00 3.00 3.00 3.00	460859 460860 460861 460862 460863 460864 460865 460866	% in. 76 in. 76 in. 76 in. 76 in. 76 in. 76 in. 76 in. 17 in.	1010 1010 1010 1010 1010 1010 1010 101	\$3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00

#### Hard Rubber Rods

Grade No. 2000. Black Hard Rubber Rod. Standard length 2 foot rough; diameter 0.56 inch and less. Grade No. 2007. Black Hard Rubber Rod. Dimensions 0.56 inch to 1.50 inch diameter.

List No.	Diameter	Grade No.	Net Prices per Lb.	List No.	Diameter	Grade No.	Net Prices per Lb.
460868 460869 460870 460871 460872 460873 460874 460875 460876	1/8 in. 1/4 in. 1/4 in. 1/8 in. 1/8 in. 1/2 in. 1/2 in. 1/8 in. 1/8 in.	2000 2000 2000 2000 2000 2000 2000 200	\$3.50 3.30 3.00 3.00 3.00 3.00 3.00 3.00	460877 460878 460879 460880 460881 460882 460883 460884		2007 2007 2007 2007 2007 2007 2007 2007	\$3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00

#### Soft Rubber Tubing

List	Inside	Covers B. & S.	Feet	List   Price	List	Inside	Covers B. & S.	Feet	List Price
No.	Diameter	Wire	per Lb.	per Lb.	No.	Diameter	Wire	per Lb.	per Lb.
460890	🦺 in.	14	30	\$2.40	460892	5 in.	6	15	\$2.40
460891	1¼ in.	10	20	2.40	460893	3% in.	4	12	2.40

#### Corrugated Rubber Matting

Grade No. 1 for dynamos and switchboards.

Insulating and Soldering Materials

List No.	Thickness	Wt. per Sq. Yd.	List Price   per Lb.	List No.	Thickness	Wt. per Sg. Yd.	List Price per Lb.
460937	an.	6 lbs.	\$1.50	460941	in.	23 lbs.	\$1.50
460938	1/8 in.	8½ lbs.	1.50	460942	% in.	28 lbs.	1.50
460939	$\frac{1}{16}$ in.	$13\frac{1}{2}$ lbs.	1.50	460943	$\frac{7}{16}$ in.	$32\frac{3}{4}$ lbs.	1.50
4609 <b>40</b>	1/4 in.	18¼ lbs.	1.50	460944	√2 in.	$37\frac{1}{2}$ lbs.	1.50

#### Improved Paper Sleeves

List No.	Style	Dimensions	List Price per 1000	List No.	Style	Dimensions	List Price per 1000
460894 460895 460896	2½A 3 B 3 C	$\frac{1}{8} \times 2\frac{3}{4}$ ins. $\frac{1}{16} \times 3$ ins. $\frac{1}{12} \times 3$ ins. $\frac{1}{12} \times 3$ ins.	\$2.80 2.80 2.80	460897 460898 460899	18A 18B 18C	$\frac{1}{8} \times 18 \text{ ins.}$ $\frac{1}{16} \times 18 \text{ ins.}$ $\frac{1}{17} \times 18 \text{ ins.}$	\$9,50 9,50 9,50

## Western Electric AJAX INSULATING MATERIAL

#### Western Electric Ajax Insulating Varnish

#### **BLACK AIR DRYING**

A jet black, lustrous moistureproof varnish, a good insulator, and possesses the maximum amount of elasticity possible to secure in a black, quick, air drying varnish. It is used for dipping new armature and field coils and also for repair work requiring a varnish which will dry quickly without baking. It air dries in one-half hour.

List No.	*List Price	Per Gal.
461002	Barreis (50 gallons)	<b>\$</b> 2.28
461003	5 gallon cans	3.20
<b>4</b> 61 <b>004</b>	1' gallon cans	4.10

#### Western Electric Ajax Air Drying Finishing Varnish

A lustrous, deep black spirit finishing varnish, oilproof, waterproof, durable, it keeps in perfect solution. It is used as a finishing coating for all kinds of electrical apparatus to prevent absorption of lubricating oils and moisture. It air dries in from 10 to 15 minutes independent upon method of application and thickness of coat.

<b>4</b> 61 <b>005</b>	Barrels (50 gallons)	<b>\$2.30</b>
461006	5 gallon cans	5.60
461007	1 gallon cans	6.90

## Western Electric Underwriters' Black ACID RESISTING INSULATING PAINT

\* This paint gives a high gloss finish which is flameproof and impervious to moisture. It is used for meter boards, switchboards, moldings, aerial and underground cables, service boxes, street car trucks, motor frames and all kinds of electrical wiring. It air dries in one half hour.

461008	Barrels (50 gallons)	<b>\$2.40</b>
461009	5 gallon cans	3.54
461010	1 gallon cans	4.50

## Western Electric Ajax Insulating Varnish CLEAR, QUICK BAKING

Designed expressly for quick repairs to motor, generator and transformer windings. For bare metal surface and sheet fiber of every description. It is clear oil and weatherproof, extremely penetrative and elastic. It is a high insulator, and is acidproof and free from acids.

461011	Barrels (50 gallons)	<b>\$3.28</b>
<b>461012</b>	5 gallon cans	4.40
<b>4</b> 6101 <b>3</b>	1 gallon cans	5.30

#### Western Electric Ajax Oilproof Core Plate Baking Varnish

Elastic, heat resisting, clear enamel, proof against oil, water and acid. It is used for separating and insulating the metal laminations used in building up the cores of oilcooled transformers. Baked in 5 minutes at 250 degrees Fahrenheit.

46101 <b>4</b>	Barrels (50 gallons)	<b>\$</b> 3.08
461015	5 gallon cans	4.40
461016	1 gallon cans	5.30

#### Western Electric Ajax No. 1 Clear Air Drying Insulating Varnish

It is clear, elastic, extremely penetrative and oilproof. Is a high insulator, and produces a uniform homogeneous film. Especially adapted for use in electrical repair shops not equipped with baking facilities. Used for armature, field and magnet coils, molding, switch bases and fiber sheet insulation. Air dries in 6 hours.

	,	
461017	Barrels (50 gallons)	<b>\$</b> 3.40
461018	5 gailon cans	4.60
461019	1 gallon cans	5.60

#### Western Electric Ajax No. 2 Clear Air Drying Insulating Varnish

Similar to No. 1, but is superior to it in flexibility, moisture proof and oilproof qualities and heavier in body. Air dries in 13 to 20 hours.

461020	Barrels (50 gallons)	<b>\$</b> 3.72
461021	5 gallon cans	5.20
461022	1 gallon cans.	6.20

\*Delivery F. O. B. Cleveland or New York. For warehouse deliveries write nearest house.

Insulating and Caldanias Massalates

## Western Electric

#### AJAX INSULATING MATERIAL

Western	Electric	Aiax	Clear	Air	Drving	Finishing	Varnish
E. C. C. C. C.		1	~1001	4	~.,	* TITIOTITIE	AMITITATI

Ajax clear insulating varnish is oilproof, waterproof, durable and keeps in perfect solution. It is used

Ajax clear insulating varnish is oilproof, waterproof, durable and keeps in perfect solution. It is use as a finishing coating for all kinds of electrical apparatus to prevent absorption of lubricating oils and moi ture. It air dries in from 10 to 15 minutes, dependent on method of application and thickness of coat.	
List Pric per Ga	
461023       Barrels (50 gallons)       \$4.4         461024       5 gallon cans       5.6         461025       1 gallon cans       6.9	10 30
Western Electric Ajax, Black Air Drying Core Plate Varnish	
Designed exclusively for the insulation of armature, field and air cooled transformer laminations against Eddy or Foucault currents. Coat of usual thickness will air dry in 5 minutes.	st
461026       Barrels (50 gallons)       \$1.9         461027       5 gallon cans       3.3         461028       1 gallon cans       4.3	30
Western Electric Ajax Insulating Varnish Coillac	
A black baking insulating varnish for general coil work and insulating purposes. Combines high glowith great elasticity and nuncture resistance.	88
461029       Barrels (50 gallons)       \$2.7         461030       5 gallon cans       3.9         461031       1 gallon cans       5.0	90
Western Electric Ajax Black Acidproof Paint	
This is an acidproof, waterproof and flameproof paint. Designed for use on battery boxes, switch boards, switch handles, cable connections and connection boxes. Also adapted for use on armature an field coils in repair shops not equipped with baking ovens. It air dries in 8 hours.	
461032       Barrels (50 gallons)       \$2.1         461033       5 gallon cans       3.3         461034       1 gallon cans       4.0	30
Western Electric Ajax Black Elastic Baking Insulating Varnis	h
Black, plastic, oilproof, suitable for insulating high voltage, generator windings, oil cooled transform coils and street railway motor armature and field coils which are subjected to continued vibrations and varying loads.	er
## 1853.5 ## 185	70
Western Electric Ajax Clear Elastic Baking Insulating Varnish	
A clear, tough, elastic, high heat resisting varnish. Designed expressly for insulating—form wound armatures and field coils that are brushed while winding and as finishing—coat for completed armature and field coils. Excellent material for treating automobile ignition cables, canvas linen, cotton tapes, etc. 461038 Barrels (50 gallons). \$3.5.461039 5 gallon cans. 4.7.461040 1 gallon cans. 5.7.	es c. 56 70
Western Electric Ajax Black Quick Baking Insulating Varnish	
Elastic, high gloss, quick baking varnish, oil and waterproof. Adaptable for quick repairs to motor generators, transformers, and as insulator for high voltage windings of large cross sections.	rs,
### ### ### ### ### ### ### ### ### ##	00

#### Western Electric Ajax Pot Head Compound or Filling Compound

List		Less than 3 Gallons	3 to 10	10 Gallons
No.		(24 Lbs.)	Gallons	and Over
461044	Pothead Compound or Filling Compound	\$0.50	\$0,34	<b>\$0.2</b> 8

\*Delivery F. O. B. Cleveland or New York. For warehouse deliveries write nearest house.

List Price

\$1.40

List No.

460911

460912

#### INSULATING MATERIALS

Lusti is particul	ralac is a quick air drying insulating varnish and can be used on armature on field coil work. It arly valuable for varnishing general repair work. It should be reduced with benzine.
List No. 461069 461070 461071	Barrels (50 gallons)       List Price per Gallon         5 gallon cans       \$2.70         1 gallon cans       4.10         2 gallon cans       5.20
Arma	alac is a high-grade insulating compound used for insulation of armature and field coils.
List No. 460902 460903	List Price per Gal. In barrels \$2.00 In cans, 1, 2, 5, or 10 gallons 2.50
insul	llac is a quick-drying transparent insulating varnish which has high non-conductive qualities.
List No. 460907 460908	List Price per Gal.         In barrels       \$3.10         In cans, 1, 2, 5 or 10 gallons       3.60
Enan station; us	nelac is a quick-drying glossy black insulating varnish for general use around the electric power sed on moldings, switchboards, junction boxes, controller cases, etc.

#### P. & B. No. 1 Compound

#### P. & B. No. 2 Compound

No.	1 is used where an almos	t immediate drier a	nd greatest	amount of penetration	possible is desired.
List No. 460924 460925 460926	Description One gallon cans Five gallon cans Barrel lots of about 50 g	3.84	460927 460928	Description One gallon cans Five gallon cans Barrel lots of about 50	3.24

"Delta" tape is particularly adapted for rewinding ribbon wound cords used for railway, motor and controller work where high temperature and severe conditions are to be met.

List	Thick- ness Mils.	Width	Approx. Feet		I TELL II I I I I PERCO		List T	Thick-	Width	Approx. Feet		Approx.	List Price
No.		Ins.	per Lb.	per Roll	Pactr. per	per Lb.		ness Mils.	Ins.	per Lb.	per Roll	Pnctr. Voltage	per Lb.
460267	10	3/4	351	161	2500	\$3.50	460274	15	13/4	119	107	3500	\$3.50
460268	10	1	264	161	2500	3.50	460275	15	11/2	99	107	3500	3.50
460269	10	11/4	211	161	2500	3.50	460277	20	3/4	140	80	4400	3.50
460270	10	11/2	176	161	2500	3.50	460278	20	1	105	80	4400	3.50
461064	12	3/4	290	140	2900	3.50	460279	20	11/4	84	80	4400	3.50
461065	12	1	218	140	2900	3.50	460280	20	11/2	70	80	4400	3.50
461066	12	11/4	175	140	2900	3.50	460282	25	3/4	111	64	5000	3.50
461068	12	11/2	146	140	2900	3.50	460283	25	1	83	64	5000	3.50
460272	15	3/4	198	107	3500	3.50	460284	25	11/4	67	64	5000	3.50
460273	15	1	149	107	3500	3.50	460285	25	11/2	56	64	5000	3.50

Furnished in rolls 5 inches in diameter, with a 1/2 inch hole at center, unless otherwise specified

"Delta" sheeting is intended for use where large pieces of insulating material are required, but identical with "Delta" tape in properties, texture and finish. It is 8 inches wide and furnished in rolls 5 inches in diameter, with a ½ inch hole at center, unless otherwise specified.

List No.	Thckns. Mils.	Appro	x. Feet	Approx. Puncture	List Price	List	Thckns.	Appro	r. Feet	Approx.	List Price
		per Lb.	per Roll		per Lb.	No.	Mils.	per Lb.	per Roll	Voltage	per Lb.
460287 461067 460288	10 12 15	33 · 27 19	140 120 93	2500 2900 3500	\$3.00 3.00 3.00	460289 460290	20 25	13 10	70 56	4400 5000	\$3.00 3.00

"Delta" Plastic Compound is used for smoothing the surface and filling cavities of field coils prior to applying the outer insulation.

#### Western Electric

#### INDIA MICANITE PLATE

#### NO. 1 INDIA MICANITE PLATE For Molding

No. 1 India Micanite Plate is made of very thin films of India mica cemented together with pure shellac and carefully surfaced to a uniform thickness.

When heated it becomes flexible and in that condition can readily be formed into such shapes as conical and band rings for commutators, troughs for armature slots, spools for magnets, and the thinner sheets rolled into tubes. Upon cooling it regains its rigidity. It is also used for flat work where high temperature is not a factor, such as transformer insulation, etc.

It is not intended for insulation between the copper bars of commutators, and must not be used for that

purpose.

For commutator bar insulation we furnish special Micanite Plate.

#### Stock Thicknesses of 18 x 36 Inch No. 1 Plate

				List	1				List
List	Thickness	Approx. Lbs.	Aver. Punct.	Price	List	Thickness	Approx. Lbs.	Aver. Punct.	Price
No.	Inches	per Sheet	Voltage	per Lb.	No.	Inches	per Sheet	Voltage	per Lb.
1200	.010	.503	9540	\$2.25	1207	.040	2.17	<b>3</b> 8160	\$1.90
1201	.015	.748	14310	2.25	1208	. 045	2.25	42930	1.90
1202	.020	.946	19080	2.25	1209	**	2.42	44645	1.90
1203	.025	1.21	23850	1.90	1210	. <b>050</b>	2.64	47700	1.90
1204	.030	1.53	28620	1.90	1213	16	3.32	59625	1.90
1205	3/2	1.64	29765	1.90	1216	32	4.92	89390	1.90
1206	.035	1.68	33390	1.90	1217	1/8	6.22	119250	1.90

No. 1 Plate in standard size 18 x 36 inch sheets can be furnished of any special thickness at following prices:

Sheets of special size or shape at slight increase over above prices.

## NO. 11 INDIA MICANITE PLATE For Molding

No. 11 India Micanite Plate is made of the same quality of India mica films and shellac that is used in the No. 1 plate, but is not quite as exact to thickness.

It becomes flexible when heated, is readily molded into form, and is suitable for all general purposes where a slight variation in thickness is permissible, except commutator segments. It is not intended for insulation between the copper bars of commutators.

#### Stock Thicknesses of 18 x 36 Inch No. 11 Plate

1218	.010	. 503	9540	\$2.15    1225	.040	2.17	38160	<b>\$2</b> .00
1219	.015	.748	14310	2.15   1226	.045	2.25	42930	2.00
1220	.020	.946	19080	2.15   1227	री	2.42	44645	2.00
1221	.025	1.21	23850	2.00   1228	.050	<b>2</b> .64	47700	2.00
1222	.030	1.53	<b>2</b> 862 <b>0</b>	2.00   1231	16	<b>3</b> .32	59625	2.00
1223	1/2	1.64	29765	2.00   1234	37	4.92	89390	2.00
1224	. 035	1.68	33390	2.00    1235	1/8	6.22	119250	2.60

No. 11 Plate in standard size 18 x 36 inch sheets can be furnished of any special thickness at following prices:

## NO. 2 INDIA MICANITE PLATE For Commutator Segment Insulation

No. 2 India Micanite Plate is made of very thin films of India mica cemented together with the smallest possible amount of pure shellac, and carefully surfaced to a uniform thickness.

This plate is specially made to be cut into segments for insulating copper bars of commutators, and cannot be molded.

#### Stock Thicknesses of 18 x 36 Inch No. 2 Plate

1236 1237 1238 1239 1240	.010 .015 .020 .025 .030	.567 .85 1.13 1.41 1.70	9550 14325 19100 23875 28650	\$2.70 2.70 2.70 2.23 2.23	1245 1246 1248 1249	.045 .050 .060	2.55 2.65 2.83 3.4 3.54	42975 44695 47750 57300 59685	\$2.23 2.23 2.23 2.23 2.23
1240 1241 1242 1243	.030 .035 .040	1.70 1.76 1.98 2.27	28650 29800 33425 38200	2 23 2 23 2 23 2 23	1252 1253	16 32 1/8	3.54 5.3 7.05	59685 89485 119375	2.23 2.23 2.23

No. 2 Plate in standard size 18 x 36 inch sheets can be furnished of any special thickness at following prices:

#### INDIA AND AMBER MICANITE PLATE

#### NO. 22 INDIA MICANITE PLATE

#### For Commutator Segment Insulation

No. 22 India Micanite Plate is made of the same quality of India mica films and shellac that is used in the No. 2 Plate.

This plate differs from No. 2 only in that the variation of thickness is not confined to such close limits. In practice it gives admirable service for commutator bar insulation, but cannot be molded.

#### Stock Thicknesses of 18 x 36 Inch No. 22 Plate

	Approx.			List	1	Approx.			List
List	Thickness,	Approx. Lbs.	Aver. Punct.	Price	List	Thickness	Approx. Lbs.	Aver. Punct.	Price
No.	Inches	per Sheet	Voltage	per Lb.	No.	Inches	per Sheet	Voltage	per Lb.
1254	.010	.567	9550	<b>\$</b> 2.60	1262	.045	2.55	42975	<b>\$</b> 2.15
1255	.015	.85	14325	2.60	1263	364	2.65	44695	2.15
1256	.020	1.13	19100	2.60	1264	. ŎŠO	2.83	47750	2.15
1257	.025	1.41	23875	2.15	1266	.060	3.4	57300	2.15
1258	.030	1.70	28650	2.15	1267	16	3.54	59685	2.15
1259	32	1.76	29800	2.15	1270	32 32	5.3	89485	2.15
1260	. 035	1.98	33425	2.15	1271	1/8	7.05	119375	2.15
1261	.040	2.27	38200	2.15		, 0			

No. 22 Plate in standard size 18 x 36 inch sheets can be furnished of any thickness at following prices:
.025 in. thick or over.......\$2.15 per lb. .024 in. thick or under......\$2.60 per lb.
Sheets of special size or shape at slight increase over above prices.

## NO. 3 AMBER MICANITE PLATE For Commutator Segment Insulation

No. 3 Amber Micanite Plate is made of very thin films of Canadian amber mica cemented together with pure shellac and carefully surfaced to a uniform thickness. This plate is in every way identical with the No. 2 India Plate, except in the mica. This being Canadian amber, the plate is softer and presents less liability of failure to wear down evenly with the copper. For commutators containing a larger number of bars, or where the insulation is thicker than  $\frac{1}{42}$ , or where copper bars and brushes are softer than those usually employed, we recommend the use of No. 3 Plate instead of No. 2.

This plate cannot be molded.

#### Stock Thicknesses of 18 x 36 Inch No. 3 Amber Plate

1272	.020	1.17	16600	\$4.00	1278	.045	2.64	37350	<b>\$3.40</b>
1273	.025	1.47	20750	3.40	1279	84	2.74	38845	3.40
1274	.030	1.76	24900	3.40	1280	. <b>050</b>	2.94	41500	3.40
1275	3/2	1.83	25895	3.40	1282	.060	<b>3</b> .52	49800	3.40
1276	.035	2.05	29050	3.40	1283	16	3.67	51875	3.40
1277	.040	2.35	33200	3.40	l				

No. 3 Plate in standard size 18 x 36 inch sheets can be furnished of any special thickness at following prices:

#### NO. 33 AMBER MICANITE PLATE For Commutator Segment Insulation

No. 33 Amber Micanite Plate is made of the same quality of Canadian amber mica films and shellac that, is used in the No. 3 Plate.

This plate differs from No. 3 only in that the variation in thickness is not confined to such close limits In practice it gives admirable service for commutator work.

This plate cannot be molded.

#### Stock Thicknesses of 18 x 36 Inch No. 33 Amber Plate

1284	.020	1.17	16600	<b>\$</b> 3.92    129	0 .045	2.64	37350	<b>\$</b> 3.57
1285	.025	1.47	20750	3.57   129	1 _3_	2.74	38845	3.57
1200	.020	1.71	20100	0.07    128		4.14	00040	0.01
1286	. 030	1.76	24900	3.57   129	2 .050	2.94	41500	3.57
1200	.030	1.70	24900	3.37    128	2 .000	2.94	41000	o.01
1007	1	1.83	25895	3.57   129	4 .060	2 50	49800	9 57
1287	32	1.00	<b>20090</b>	0.07    128	4 .000	3.52	49000	3.57
1000		0.05	00050	3.57   129	. 1	0.07	E1075	0 57
1288	.035	2.05	29050	3.57   129	ि के	3.67	51875	3.57
1280	040	2 35	33200	3 57				
1784	(141)	2.35	337181	3 5/ 11				

No. 33 Plate in standard size 18 x 36 inch sheets can be furnished of any special thickness at following prices:

#### INDIA MICANITE PLATE AND CLOTH

#### NO. 4 INDIA MICANITE PLATE

This plate is made for flat work and for purposes where extreme accuracy of thickness is not important. It is suitable for all kinds of bases, round and square washers, and for all kinds of apparatus not subjected to high heat.

Its non-liability to fracture under extreme vibration is a valuable feature for marine work. It does not take a screw thread, but can be drilled and turned.

No. 4 Plate is not furnished thinner than 1 inch.

Secola Thick	nesses of 18 v	26 Imak	No 4 Disas
STOCK I DICK	DARGAS OF IX 1	an inch	NO. 4 PISTS

Lis <b>t</b>	Approximate Thickness.	Approximate Lbs.	Average Punct.	List Price
No·	Inches	per Sheet	Voltage	per Lb.
1296	1/8	$^{-}$ 2.95	50000	<b>\$</b> 1.52
1297	<del>Ž</del>	4.3	75000	1.52
1298	1/8	5.9	100000	1.52
1299	38	9.85	150000	1.52
1300	<b>i</b> ⁄4	13.2	200000	1.52
1301	3/8	19.1	300000	1.52
1302	$\frac{1}{2}$	25.7	400000	1.52

No. 4 Plate in standard size 18 x 36 inch sheets can be furnished of any special thickness at following prices:

Sheets of special size or shape at slight increase over above prices.

#### NO. 5 FLEXIBLE MICANITE PLATE

No. 5 Flexible Micanite is made of very thin films of India mica cemented together with a special insulating cement of great flexibility and adhesiveness. This article in many ways presents mica in its most convenient and economical form for electrical insulation. It can be formed or bent to shape without the application of heat.

It is an excellent insulator for armature slots, armature, magnet and commutator cores, transformers, field coils, etc.

It can be stripped up into narrow widths, and when used in conjunction with Linotape makes a most efficient insulation for all kinds of conducting wires and cables.

Stock Thicknesses of 36 x 36 Inch No. 5 Plate

List	Approximate Thickness,	Approximate Lbs.	Average Punct.	List Price
No.	Inches	per Sheet	Voltage	per Lb.
1303	.005	.575	<b>294</b> Ŏ	\$2.22
1304	.010	.967	5880	1.90
1305	.015	1.43	8820	1.66
1306	.020	1.84	11760	1.66
1307	.025	<b>2</b> .2 <b>4</b>	14700	1.66
1308	.030	2.64	17640	1.66
1309	+	3.04	18345	1.66
1313	16	6.03	36755 -	1.66
1314	i,	12	73500	1.66

No. 5 Plate in standard size 36 x 36 inch sheets can be furnished of any special thickness at following prices:

.015 in. thick or over...................\$1.66 per lb. .010 to .014 in. thick........ ....\$1.90 per lb. \$2.22 per lb. .009 in. thick or under.....

Sheets of special size or shape at slight increase over above prices.

No. 20 Micanite Cloth is made with 1, 2 or 3 layers of high-grade India mica films, carefully cemented together with overlapping edges into sheet form, the sheet being faced on one side with cotton cloth and on the other side with Japanese paper.

It is an excellent composite insulation, and is often used in conjunction with Empire cloth and paper,

fish paper, etc., for transformers, field magnets, armature cores, etc.

In strip form it is an efficient mica insulation for wrapping all sorts of conductors. When applied in this manner it is usual to bind it in position with Linotape or the ordinary friction tape.

Stock Thicknesses of No. 20 Micanite Cloth

List	Approximate Thickness,	Layers	Approximate Lbs.	List Price
No.	Inches	of Mica	per Roll	per Lb.
1315	.008	1	2.8	\$1.84
1316	.011	<b>2</b>	4.2	1.72
1317	.014	3	5.4	1.68

#### NO. 21 MICANITE CLOTH

Extra Flexible

No. 21 Micanite Cloth is identical with No. 20 Micanite Cloth except that the material is made with a very thin rubber tissue as a binder between the layers of mica, cloth and paper.

	Stock Thicknesses of No. 21 Micanite Cloth								
List	Approximate Thickness,	Layers	Approximate Lbs.	List Price					
No.	Inches	of Mica	per Roll	per Lb.					
1318	.008	1	<b>2.1</b>	<b>\$2.56</b>					
1319	.011	2	3.5	3.16.					
1320	.014	3	Digitized by Google	2.20					
Insulating	and Soldering Materials	32	Digitized by GOOGTE						

#### INSULATING MATERIAL

#### NO. 24 MICANITE PAPER

No. 24 Micanite Paper is of the same nature as No. 20 Micanite Cloth except that the material is faced on both sides with Japanese tissue paper instead of cotton cloth, the object being to supply an insulation thinner than Micanite Cloth, but retaining the same thickness of mica film.

#### Stock Thicknesses of No. 24 Micanite Paper

List	Approximate Thickness,	Layers	Approximate Lbs.	List Price
No.	Inches	of Mica	per Roll	per Lb.
1321	.005	1	. 2.1	<b>\$2.13</b>
1322	.008	${f 2}$	<b>3</b> .3	1.96
132 <b>3</b>	.011	3	4.4	1.96

#### NO. 25 MICANITE PAPER

#### Extra Flexible

No. 25 Micanite Paper is similar to No. 24 Micanite Paper except that the material is made with a very thin rubber tissue as a binder between the layers of mica, cloth and paper, instead of an oil varnish, which is used as a binder in the No. 24 Micanite Paper.

#### Stock Thicknesses of No. 25 Micanite Paper

List	Approximate Thickness,	Layers	Approximate Lbs.	List Price
No.	Inches	of Mica	per Roll	per Lb.
1324	.005	1	1.8	<b>\$</b> 2. <b>76</b>
1325	.008	2	3.	2.48
1326	.011	3	4.1	2.28

Any special thickness or size of the above materials made on order.

#### NO. 26 ROPE PAPER AND MICA

A composite insulation consisting of rope paper faced on one side with two layers of India mica films and tissue paper.

This material has a wide range of utility in the field of moderate voltages and temperatures.

It is furnished in sheets 36 x 36 inches in the following stock thicknesses:

List No.	Thickness of Raw Paper, Inches	Approximate Finished Thickness, Inches	Layers of Mica	Approximate Oz. per Sheet	List Price per Lb.
1327	.003	.007	2	71/2	<b>\$</b> 2. <b>2</b> 3
1328	.005	.010	2	12	1.66
1329	.010	.015	2	15	1.33

#### NO. 27 PRESSBOARD AND MICA

This material is composed of No. 1 pressboard faced on one side with two overlapping layers of India mica films and tissue paper.

Mechanically the sheet possesses greater rigidity than No. 26 rope paper and mica, otherwise, the insulation is of the same order.

It is furnished in sheets 36 x 36 inches and the following thicknesses are kept in stock:

List No.	Thickness of Raw Pressboard, Inches	Approximate Finished Thickness, Inches	Layers of Mica	Approximate Oz. per Sheet	List Price per Lb.
1330	.007 to .008	.012	2	141/2	\$1.52
1331	.012	.017	· 2	18	1.24
1332	.015	.020	2	211/4	1.14

#### NO. 29 FISH PAPER AND MICA

This material consists of fish paper faced on one side with two overlapping layers of India mica films and tissue paper. The fish paper employed is also known as Fyberoid, Tarpon Paper, Peerless Paper, etc.

This insulation is recommended when a material stronger than rope paper or pressboard is desired as a base for the mica films.

It is furnished in sheets 36 x 47 inches, and the following thicknesses are kept in stock:

List No.	Thickness of Raw Fish Paper, Inches	Approximate Finished Thickness, Inches	Layers of Mica	Approximate Lbs. per Sheet	List Price per Lb.
1350	.005	.010	2	1.2	\$1.52
1351	.007	.012	2	1.4	1.43
1352	.010	.015	2	1.6	1.29
13 <b>53</b>	.015	.020	2	Digitized by 2.300glC	1.14

#### INSULATING MATERIAL

#### MICANITE TUBING

We furnish square, oval, hexagonal and other special shaped tubing of any size for special insulating requirements; large round tubing for induction coils, specially treated tubes or bushings for apparatus immersed in oil, special heat-proof bushings rolled without cement for spark plugs, gas engines, etc. Net prices quoted on receipt of specification.

Round Micanite Tubing is manufactured in various grades as follows:

#### ENTIRE MICANITE TUBING

This tubing is made entirely of Micanite with no paper whatsoever in its construction. It is recommended for high potential work; for apparatus subjected to sufficient heat to render paper objectionable. For sleeves for small commutators: brush holder study, grid rheostat rods, etc.

For sleeves for small commutators; brush holder studs, grid rheostat rods, etc.

A thin covering of paper is applied, when requested, on the outside of the tube to guard against the scaling of the mica when mica washers or metal parts are to be assembled on the tubes. Such covering is less than 2 per cent. of the material.

#### MICANITE AND RICE PAPER TUBING

This tubing is composed of 85 per cent. Micanite and 15 per cent. paper and is used universally where high-grade insulation is required. The small amount of paper does not materially affect the insulating qualities of the tube. It effects a saving in the cost of manufacture, enabling us to offer this grade at a lower price than the entire Micanite Tubing.

#### ROUND MICANITE TUBING

List price per foot in lengths of one foot and over. Lengths under one foot special prices.

Inside Diam.					Inside Micanite and Rice Paper Tubes Diam. Thickness of Wall						
					9 T	1/1-					1 /7-
Ins.	<del>1</del> In.	16 In.	📆 In.	⅓ In.	18 In.	1/4 In.	Ins.	1/2 In.	16 In.	🛂 In.	$\frac{1}{8}$ In.
<b>⅓</b> 8	<b>\$</b> 0.19	<b>\$</b> 0.24	<b>\$</b> 0.30	\$0.41	<b>\$</b> 0.59	<b>\$0.86</b>	1/8	<b>\$</b> 0.16	<b>\$</b> 0.19	<b>\$</b> 0.25	<b>\$</b> 0.32
16	.20	.27	. 34	.45	.68	.95	16	. 17	.22	.27	. 36
<u> </u>	.15	.23	.30	.41	.63	.95	<b>1</b> /4	.12	. 17	.24	. 32
16	.16	.26	. 35	. 47	.72	1.03	1 ★	.13	. 19	.27	. 38
<b>3</b> /8	.17	.26	. 35	.47	.77	1.13	14	. 14	. 19	.28	. 40
16	.18	.26	.38	. 52	.81	1.17	16	.14	.22	. 32	. 45
$\frac{1}{2}$	.18	.30	.43	. 59	.90	1.26	1/2	. 16	.25	.36	. 50
16	.20	. 32	.45	.63	.99	1.35	18	.17	.26	.36	. 52
§8	.20	. 35	.50	.68	1.03	1.49	16 5/8	.17	.27	.41	. 56
<del>}</del>	.24	.36	.53	.72	1.13	1.58	l <del>     </del>	. 19	.29	.44	.60
\$4	.23	.38	.59	.77	1.22	1.67	14	.20	.30	.47	.63
<b>%</b>	.24	.39	.61	.81	1.26	1.76	14	.21	.32	.50	.68
1/8	.26	.41	.63	.86	1.35	1.89	1/8	.23	.32	. 53	.72
#		.42	.68	.90	1.40	1.94	15	.24	. 34	. 54	.77
1		.45	.74	.99	1.49	2.07	1	.26	.38	.62	.83
$1\frac{1}{16}$		.49	.78	1.03	1.62	2.16	116	.27	.41	.63	.86
11/6	.32	.51	.81	1.08	1.67	2.25	11/6	.28	.43	.68	.90
1 <del>1</del>	.34	.54	.85	1.13	1.71	2.39	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.30	.45	.71	.95
11/2	.35	. 56	.88	1.17	1.80	2.48	1½ 1½	.32	.47	.72	. 99
1 1	.36	.58	.95	1.26	1.89	2.57	14	.32	.49	.77	1.03
13%		.60	.95	1.31	1.94	2.66	13/8	.35	.50	. 80	1.08
$1\frac{7}{16}$		.62	.96	1.35	2.02	2.79	178	.35	.53	.83	1.13
11/2		.66	1.03	1.40	2.12	2.88	11/2	.38	.56	.88	1.17
1 16		.68	1.08	1.44	2.16	2.97	116		.59	.90	1.22
18%	.44	.70	1.13	1.49	2.25	3.06	18%		.61	.95	1.26
15% 1 <del>11</del>	.45	.72	1.17	1.53	2.34	3.15	1	• • • • •	.62	.99	1.31
18/	.45	.74	1.22	1.58	2.39	3.24	13%	• • • • •	.63	1.01	1.35
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.47	.77	1.22	1.62	2.48	3.33	1 3 4	• • • • •	.66	1.03	1.35
11/8	.48	.80	1.26	1.67	2.57	3.42	1 1/8	• • • • •	.68	1.07	1.44
1111		.81	1.35	1.76	2.62	3.51	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	• • • • •	.70	1.08	1.44
	.54	.86	1.44	1.80	2.70	3.69	2		.72	1.16	1.52
2			1.72		2.10		12	• • • • •		1.10	1.02

Above list price applies only on orders of 50 feet and over of a size. For orders less than 50 feet but over 24 feet add 10 per cent. to list.

For orders less than 24 feet add 20 per cent. to list.

#### MICANITE AND ASBESTOS TUBING

This tubing is composed of 60 per cent. Micanite and 40 per cent. of asbestos. It is intended for apparatus subjected to moderate heating where a lower priced tube than the Entire Micanite Tubing will answer the requirements. It is used on grid rheostats, resistance boxes, etc.

#### MICANITE AND ROPE PAPER TUBING

This tubing is composed of 60 per cent. Micanite and 40 per cent. paper. It is recommended for apparatus which is not subjected to enough heat to affect the paper and where the insulating requirements are fully met by a composite material of this kind. This grade has been adopted by many street railway companies for grid rheostat rods.

## INSULATING MATERIAL Round

#### MICANITE AND ASBESTOS TUBING

and

#### MICANITE AND ROPE PAPER TUBING

List price per foot in lengths of one foot and over. Lengths under one foot special prices.

Inside			ı	Inside			
Diam.,	Th	ickness of Wall		Diam.,	Th	ickness of Wall—	
Inches	🔒 Inch	3 Inch	1/8 Inch	Inches	16 Inch	32 Inch	1/8 Inch
<b>¼</b>	<b>\$</b> 0.13	\$0.17	\$0.23	15	\$0.21	<b>\$</b> 0.35	\$0.44
Ã.	.14	.19	.26	l i	.25	.36	.49
<b>3</b> ∕8	.13	.18	.26	17	.26	.40	. 53
14	.14	.19	.28	11/8	.26	.43	.56
1/2	.16	.22	.30	1 14	.27	.44	.59
14	.17	.24	.34	11/2	.28	.45	.62
1/4	.18	.26	.35	1 15	.30	.48	.64
Ħ	.18	.27	.36	13%	.31	.50 .53	.67
<b>1</b> / <sub>4</sub>	.19	.29	.41	17	.32	.53	.71
Ħ	.20	.29	.42	11%	.34	.54	.72
%	.20	.37	.44	'•	• • •		**-

Above list applies only on orders of 50 feet and over of a size. For orders less than 50 feet but over 24 feet add 10 per cent. to list. For orders less than 24 feet add 20 per cent. to list.

#### NO. 6 AND 7 MICANITE PLATES

#### For Electric Heating Appliances

We furnish Micanite Plates to meet the unusual requirements for insulation in electrical heating appliances, using a special cement adapted to withstand a high degree of heat.

No. 6 India Micanite Plate is recommended for devices in which the heating elements attain the ordinary

temperatures required for cooking utensils, small disc heaters, domestic flat irons, etc.

No. 7 Amber Micanite Plate will stand a higher degree of heat than No. 6 and should be used in devices where the elements are subjected to higher temperatures than the ordinary.

Prices, etc., on application.

#### NO. 32 MICANITE PAPER TAPE

This paper is of the same order as No. 30 Micanite Paper Tape, except that the mica layer is faced on both sides with tissue paper, adding slightly to its thickness and mechanical strength.

In thickness it runs from .005 to .007. The following widths are kept in stock:

List	Width,	Approx. Thickness,	Approx. Oz.	List Price
No.	Inches	Inches	per Roll	per Lb.
1357	3⁄4	.005 to .007	41/2	<b>\$</b> 3.71
1358	1	.005 to .007	6	3.71

Other widths made to order.

#### MISCELLANEOUS APPLICATIONS OF MICANITE

#### Transformer Insulation

As most transformers of modern construction are immersed in oil, the Micanite used in this line of apparatus is treated to withstand the effect of oil. We have made a specialty of Micanite for this purpose. Unless specially treated, the oil will attack the cement and open up the plate.

#### Armature Troughs, Molded to Shape

The manufacturer is equipped to mold troughs of various shapes either from entire Micanite, rope paper and mica, fish-paper and mica, or fullerboard and mica. For apparatus of the Siemen & Halske and similar types where the armature winding also serves as commutator bars, they are equipped to bake the troughs so as to furnish them of the same quality as standard commutator plate.

#### Static Discs

To get best results for static machines, a special grade of mica must be used. Experience has shown that all kinds of white mica are not suitable for this purpose. The manufacturer is very careful in selecting the proper quality and in finishing the discs we take all the necessary precautions to make them run true and well balanced.

#### Special Micanite Plate for Condensers and Ozonators

For this purpose, they produce a plate from selected India mica containing the proper proportion of cement and treated to withstand as much as possible the moisture in the atmosphere which such apparatus appears very readily to attract.

#### INSULATING MATERIALS

#### Micanite Tubes for Grid Resistance Insulation

For West. 101/2 Inch Grid Diverter, Screw and Clamp Type

Micanite and Paper Tubes		Micanite and A	sbestos Tubes	Entire Micanite Tubes		
List	List Price	List	List Price	List	List Price	
No.	Each	No.	Each	No.	Each	
39109	\$0.20	39109A	\$0.20	<b>3</b> 910 <b>9E</b>	\$0.37	
39110	.21	39110A	.21	39110E	. 39	
39111	.22	39111A	.22	39111 <b>E</b>	.42	
39112	.23	39112A	.22 .23	39112 <b>E</b>	.44	
39113	.25	39113A	.25	89113E	.45	
39114	.255	39114A	.255	39114E	.47	
39115	.26	39115A	.26	39115 <b>E</b>	. 50	
39116	.27	39116A	.27	39116 <b>E</b>	.52	
39117	. 28	39117A	.28	39117E	. 53	
39118	.29 .31 .18 .19	39118A	.25 .255 .26 .27 .28 .29 .31 .18	39118E	.42 .44 .45 .47 .50 .53 .55 .55 .34 .35	
39119	.31	39119A	.31	39119E	. 57	
44543	.18	44543A	.18	4454 <b>3E</b>	.34	
44544	.19	44544A	. 19	44544E	.35	
44545	.32 .33 .34	44545A	.32 .33 .34	44545E	.60	
44551	.33	44551 A	.33	44551E	.62	
44552	.34	44552A	.34	44552E	. 63	
44553	.345	44553A	.345	44553E	.65	
44554	.35	44554A	.345 .35 .17	44554E	.67	
44555	.17	44555A	.17	44555E	.31	
558 <b>46</b>	.37	55846A	.37	55846E	.70	
55847	.38	55847A	.38	55847E	.71	
55848	.39	55848A	.39	55848E	.73	
55849	.40	55849A	.40	55849E	.62 .63 .65 .67 .31 .70 .71 .73 .75	
55850	.41	55850A	.41	55850E	.77	
55851	.43	55851 A	.43	55851E	.80 .81	
558 <b>52</b>	44	55852A	.44	55852E	.81	

#### Empire Oiled Cloths

The fabric base of Empire ciled cloth is a specially finished and closely woven cambric made from long fiber cotton; special attention being paid to its tensile strength. The coating consists of two or more films of pure oxidized oil, which is prepared under the manufacturer's own special process.

The number of each grade, as will be noticed, gives an indication of the thickness.

For Empire cloth cut into tape see under Linotape.

				List			
List No.	Quality of Raw Fabric	Thic Inches	kness Mm.	Approx. Thickness of Oil Films Inches	Before Baking per .001 Inch	After Baking 48 Hours per .001 Inch	Price per Yard In 25 Yd, Roll Lota
4	Cambric	.004	0.102	.001	1400	1470	\$0.70
5	Cambric	.005	0.127	.001	1080	1250	.69
5Ö	Cambrie	.005	0.127	.001	900	1092	.60
500	Cambrio	.005	0.127	.001	980	1080	.50
7	Cambrio	.007	0.178	.003	1171	1470	.75
70	Cambric	.007	0.178	.002	945	1030	.63
700	Cambric	.007	0.178	.0025	1070	1080	.56
8	Cambric	.008	0.203	.003	1030	1210	.65
80	Cambric	.008	0.203	.003	970	1150	. 59
800	Cambric	.008	0.203	.0035	1000	1270	.60
10	Cambric	.010	0.254	.0045	1100	1166	.70
100	Cambric	.010	0.254	.005	1000	1130	.63 .59
1000	Cambric	.010	0.254	.0055	108 <b>0</b>	1210	. 594
12	Cambric	.012	0.305	.0065	965	1230	.81
120	Cambric	.012	0.305	.007	10 <b>20</b>	114Q	.75
1200	Cambric	.012	0.305	.0075	1010	1060	.70
15	Cambric	.015	0.381	.0095	1020	1240	1.01
150	Cambric	.015	0.381	.010	1060	1220	.96
1500	Cambrio	.015	0.381	0105	1050	1080	.88

#### **Empire Oiled Canvas and Ducks**

Nos. 155 and 16 are made on fabric bases that have been specially finished to insure smooth and even coating of the oil. Nos. 200 and 300 ducks have great resistance to mechanical wear and imperviousness to moisture, but do not have the same smooth surface as the other cloths.

155	Canvas	.015	0.381	.007	600	740	\$1.01
16	Canvas	.016	0.406	.005	765	730	1.07
200	Duck	.020	0.508		• • • •	• • • •	. 81
300	Duck	.030	0.762	• • • •			1.14

#### **Empire Oiled Linen**

For purposes of insulation linen has no special advantage over cotton except that of resisting a slightly higher voltage for a given thickness.

We furnish only one grade, the base being an imported Irish linen coated with double films of special oxidized Empire oil,

and the fabric is thoroughly impregnated. 6 Linen 0.152

1258

1373

\$1.66

#### **Empire Oiled Silk**

Empire oiled silk has for a base a closely woven fabric of pure silk. It is an excellent insulation where a material possessing very high insulating qualities combined with extreme thinness and great flexibility is demanded. Two grades are manufactured, in two thicknesses.

44	Silk	.004	0.102	.00175	1230	1330	\$1.20				
440	Silk	.004	0.102	.00175	1350	1450	1.60				
66	Silk	.006	0.152	.00375	1100	1200	1.35				
660	Silk	006	0 152	00375	1230	1330	1.70				

All the above Empire cloths, etc., are furnished in rolls containing 25, 50, 100 yards or in any length desired.

We cut any width of any of the above material to order provided order amounts to multiples of 72 square yards.

For list of standard oiled tapes see under Linotape.

#### INSULATING MATERIAL

#### Linotape

Linotape is the registered trade-mark name under which we sell Empire Oiled Cloth in tape form.

We cut tape in any width from % inch and above, from all the grades of Empire material.

Linotape is an insulating tape of the highest order. Its virtue, as with the Empire material, rests in the multiplication of oxidized oil films on its surfaces, It has come into general use as the insulating medium for cables of all descriptions, and is used extensively in coil winding, cable splicing, bus bars, and all high tension work.

It is furnished in rolls guaranteed to contain 72 lineal yards, each roll coated on the edges with paraffin to exclude moisture and both straight and bias are continuous in the roll.

#### **BIAS CUT LINOTAPE**

Width Inches	No. 72 Thickness .0 List No.	07 Inches. List Price per 144 Yds.	No. 10 Thic List No.	ckness .010 Inches. List Price per 144 Yds.	No. 125 Thicknes List No.	s .012 Inches. List Price per 144 Yds.
8/2	1600	<b>\$</b> 1.35	1630	\$1.45	1665	\$1.78
1/2	1601	1.56	1631	1.67	1666	1.99
5/R	1602	1.89	1632	1.99	1667	2.37
3/4	1603	2.20	1633	2.31	1668	· 2.74
<b>1/8</b>	1604	2.53	1634	2.63	1669	3.12
1	1605	<b>2</b> .80	1635	<b>2.95</b>	1670	3.50
11/4	1606	3.50	1636	3.70	1671	4.35
11/2	1607	4.19	16 <b>37</b>	4.46	1672	5.27

#### LENGTHWISE CUT LINOTAPE

Width	No. L Thickness List	List Price	· List	Thickness .010 Inches. List Price	No. N Thickness List	List Price
Inches	No.	per 144 Yds.	No.	per 144 Yds.	No.	per 144 Yds.
<b>¾</b>	2333	<b>\$</b> 1.24	<b>234</b> 3	\$1.34	2363	\$1.61
1/2	2334	1.45	2344	1.56	<b>2364</b>	1.83
5∕8	2335	<b>1.72</b>	2345	1.83	2365	2.20
3/4	2336	1.9 <b>9</b>	2346	2 09	2366	2.53
<b>₹</b> 8	2337	<b>2</b> 2.6	2347	2.42	2367	2.90
1	2338	2.52	2348	2.69	2368	3.23
11/4	2339	8.17	2349	3.38	2369	4.03
11/2	2340	3.81	2350	4.09	<b>2370</b>	4.84

Prices of widths greater than 11/2 inches are proportionate to price of 1 inch width. All above Linotape

of 34, 1 and 1½ inch widths are carried in stock. Other widths furnished promptly on order.

In addition to tapes listed above we will cut any width of any thickness of Empire cloth to order provided order amounts to multiple of 72 square yards.

## **Empire Oiled Paper**

The line of Empire Oiled Papers is very complete, especially so in regard to its wide range of thicknesses The papers forming the bases all possess the greatest tensile strength consistent with their thickness and have been selected for their uniformity of thickness, and freedom from deleterious chemicals such as sulphite, etc. The oil films with which they are coated are of exactly the same nature as the films on the Empire cloths, linen, etc.

We draw special attention to the condenser papers which, on account of their extreme thinness and high tensile strength, are giving great satisfaction to the manufacturers of induction coils, and other delicate work. The thicker papers have been selected for their great tensile strength, density and evenness of texture. Furnished in rolls 36 inches wide, containing 25 or 50 yards, or in sheets 36 x 36.

List	Quality of	Thic	kness	Approximate Thickness of Oil	Approximate Dielectric Strength	List Price per Yard
No.	Raw Paper	Inches	Min.	Films, Inches	per .001	in Roll Lots
101	Condenser	.0015	0.038	.0005	1740	<b>\$</b> 0. <b>2</b> 2
102	Condenser	.002	0.051	.001	1700	.24
10 <b>3</b>	Condenser	.003	0.076	.0013⁄4	1460	.26
104	Kraft	.004	0.102	.002	1350	.28
135	Express	.0045	0.115	.0015	1150	.22
105	Gray Rope	.005	0.127	.002	1240	.30
106	Bond	.0053/	0.14	$.002\frac{1}{2}$	1250	.40
107	Red Rope	.007	0.178	.002	1150	<b>.3</b> 8
109	Gray Rope	.009	0.228	.004	1070	.40
110	Express	.010	0.254	.005	980	.43
1111	Fullerboard	.011	0.279	.004	800	.47
1113	Cement Rope	.013	0.330	.004	810	.52
1114	Fullerboard	.014	0.355	.003	785	.68
115	Red Rope	.015	0.381	.010	( _1000, 0	· .75
118	Cement	.018	0.457	.003 igitized t	790	.70
			KA	Y		na Wassalala

#### INSULATING MATERIAL

#### Untreated Papers, etc.

Mico express paper is manufactured for us to micrometer gauge, thereby insuring uniform thickness. Special care is taken in preparing and beating the paper stock, and in calendering the sheets to provide a strong tough paper.

strong, t	ough paper.		Width		Approx. Size	Approx	. Lbs.—	List
List			of Roll	Approx. Lbs.	of Sheets	per 100		Price
No.	Material	Thickness	Inches	of Roll	Inches	Šq. Yds.	per Sheet	per Lb.
2619	Express	.003	36	120		15	Price	
2620	Express	.005	36	125		25	applicat	
2621	Express	.009	36	125		45	appuca	UOII

Mico red rope paper is manufactured from an all hemp stock, free from pin holes, and is guaranteed to contain no wood pulp. The coloring pigment is carefully selected and is free from deleterious matter.

2629	Red Rope	.005	36	100	27	Dries on
2630	Red Rope	.010	36	100	47	Price on application
2631	Red Rone	015	26	100	60	appneation

Mico cement rope paper is an uncolored, high finished hemp rope stock paper, especially recommended for strength and freedom from pin holes.

2635	Cement R	.005	36	100	19	
2637	Cement R	.007	36	100	27	Price on
2638	Cement R	.010	36	100	<b>38</b>	application
2640	Cement R	.015	36	100	57	• •

Mico fullerboard is a smooth, tough, dense, yellow insulating board, more pliable and not as hard as fiber, and a better insulator. It can be furnished in rolls in thicknesses up to .017 at slight increase in prices.

2650	Fullerboard	.008	32 x 36	
2651	Fullerboard	.010	32 x 36	
2652	Fullerboard	.012	32 x 36	Price on
2653	Fullerboard	.015	32 x 36	
2654	Fullerboard	.017	32 x 36	<b>a</b> pplication
2655	Fullerboard	.020	32 x 36	
2656	Fullerboard	.032	32 x 36	

Mico fish paper is somewhat similar to hard fiber, but is a much better insulator and has greater flexibility. High temperatures do not affect it to the same extent as they do other insulating papers.

2670	Fish Paper	.005	<b>4</b> 6	25	•	28	
2671	Fish Paper	.007	46	25		38	
2672	Fish Paper	.010	46	25		53	D-2
2673	Fish Paper	.015	46	25		88	Price on
2674	Fish Paper	.020			36 x 48		application
2675	Fish Paper	.025			36 x 48		
2676	Fish Paper	1			36 x 48		

Mico hard fiber is a tough, dense, hard, bonelike insulator of considerable value where it can be used in dry positions.

2680	Hard Fiber	<del>1</del>	36 x 48	1.4
2681	Hard Fiber	<del>3</del>	36 x 48	2.7
2682	Hard Fiber	16	36 x 48	5.3
2683	Hard Fiber	À	36 x 48	8
2684	Hard Fiber	1/8	36 x 48	10.5 Price
2685	Hard Fiber	16	36 x 48	16 on
2686	Hard Fiber	1/4	36 x 48	21 application
2787	Hard Fiber	3/8	36 x 48	31.5
<b>2688</b>	Hard Fiber	1/2	36 x 48	42.5
2689	<b>Har</b> d Fiber	5/8	36 x 48	52.5
2690	Hard Fiber	3/4	36 x 48	65

Mico horn fiber is not chemically treated. It is more flexible than ordinary hard fiber; more ductile and better for slot insulation.

2692	Horn Fiber	.005	. 42	150	21	
2693	Horn Fiber	.010	42	150	50	Price on
<b>2694</b>	Horn Fiber	.015	42	150	60	application
2695	Horn Fiber	.020	42	150	100	аррисаноп
2696	Horn Fiber	.025	42	150	112	

Mico paraffin coated papers are valuable for slot insulation as the paraffin coating acts as a lubricant, as well as a protection from moisture.

THO MOTT	a protection no.	ii moistaic.				
2700	Express	.005	36	100	35	
2701	Express	.007	<b>3</b> 6	100	50	
2702	Fish Paper	.005	<b>4</b> 6	100	32	Price on
2703	Fish Paper	.007	<b>4</b> 6	100	44	application
2704	Fish Paper	.010	46	100	62	
2705	Fish Paper	.015	46	100	98	-1-

Mico fiber tubes and rods are furnished in either red or black. Special prices on receipt of specification.

## INSULATING MATERIAL

#### Untreated Cloths

Mico Irish linen is a very thin imported linen cloth of high finish, free from nap, and considering its thinness, of considerable strength.

				Approximate	
List		Approximate	*****	Yards	
No.	Material	Thickness	Width	per Roll	
2715	Irish linen	.004	36	80	
N.	fico cambric is a good grade of cotton cloth with the w	ell-known sm	ooth camb	ric finish.	
2717	Cambric	.005	37	100	
M	lico muslin is a soft finished thin cotton cloth.				
<b>27</b> 20	Muslin	.007	37	100	
M	lico sheeting is an exceptionally strong, soft finished of	cotton cloth r	nade up wi	thout starch.	
<b>27</b> 23	Sheeting	.011	36	50	
$\mathbf{M}$	lico linen is a good grade of imported heavy Irish line	n somewhat c	oarsely wo	ven, but of considerabl	е
tensile	strength.				
2726	Linen	.012	35	40	
M	lico drill is a weight between sheeting and 8 ounce duc	k. It has gre	at strength	, of soft finish and with	1-
out sta	arch filling.	•			
2730	Drilling	.017	29	120	
M	lico 8 ounce duck is a strong light duck of superior q	uality.			
<b>27</b> 35	Duck	.020	36	120	
M	fico $12\frac{1}{2}$ ounce duck is an exceptionally strong, heav	y duck, usefu	l for arma	ture work, etc.	
<b>2738</b>	12½ oz. duck	.030	36	120	
. P	rices on untreated cloths quoted on application.				

#### Mico Cement

Mico Cement is a special cement of high insulating value, water repellent, waterproof and flexible. This is a most satisfactory cement for sticking together oily, glossy surfaces such as that possessed by Linotape, Empire cloths and papers.

For pasting labels onto oily or damp surfaces it has no equal.

The "setting up" of Mico Cement is hastened by the application of heat, but its adhesive qualities are equally as good without it.

Mico Cement has such excellent and unusual qualities that if trouble is being experienced with any other cement of whatever nature, we would advise giving Mico Cement a trial. New fields are continually being found for its use.

Mico Cement requires a special solvent, which we also supply when it is necessary to reduce the consistency of the cement.

List No.	Material	How Furnished	List Price per Gal.
3075	Mico Cement	1 qt. cans	\$4.00
3076	Mico Cement	1 gal. cans	3.50
3077	Mico Cement	5 gal. cans	3.00

## Mico Liquid Insulating Glue

This is a special glue made for gluing tape ends and for similar purposes. Will not attract moisture and does not require heat for setting.

3090	Mico glue	Digitized by 1 gal. cans 5 gal. cans	\$2.70
3091	Mico glue	5 gal. cans Insulating and Soldering Ma	

## SPECIAL FEATURES FOR SOCKETS—All Makes



Sockets with Extra Long Keye



Sockets with Metal Keys



Sockets for Special Metal Keys



Pull Sockets with Extension Chain Guides

**‡Sockets with Extra Long Keys** 

The key sockets listed in this Bulletin have keys 1/8 inch long, but can be fitted with longer keys on special order, which must specify distance desired between outside of shell and end of key.

The following lengths are carried in stock:

1 inch, same price and standard package as regular. Sockets with ½ inch and 1 inch keys may be assorted to make up standard package quantity. Sockets with keys longer than 1 inch may not be assorted with sockets having ½ inch and 1 inch keys to make up standard package quantity.

1½, 1½, 2 and 2½ inches, add to list price of Standard sockets, 10 cents; to Mfrs. List, 5 cents. Standard package, 100 of one length. On orders for sockets with extra long keys, where the length is not

given, we furnish 1½ inch. 1 Sockets with Metal Keys

We are prepared to fit to any key socket in this Bulletin a metal key as shown in illustration. This key is detachable, so that it may be given the same finish as the socket or fixture. The standard metal key measures ¾ inch from the end to the shell. Longer keys will be furnished on special order.

Sockets with metal keys not longer than 1 inch, add to list price of Standard sockets 17 cents; to Mfrs.

List, 7 cents.

Sockets with metal keys longer than 1 inch, add to list price of Standard sockets 29 cents; to Mfrs.

We are prepared to furnish sockets, as shown in the illustration, designed to receive a special key furnished by the fixture manufacturer, to match the fixture. The threaded metal part of the key mandrel is thoroughly insulated from the other parts of the socket. The screw is 21 inch diameter, 26 threads. Add to list price of Standard sockets, 17 cents; to Mfrs. List 7 cents. Standard package, 100.

#### **Pull Sockets with Extension Chain Guides**

Pull sockets installed in husks or socket covers require extension chain guides to carry the chain free of cover and shade. The chain guide is not attached to the socket shell but to the socket mechanism. It is detachable and separable and can be removed for refinishing. By carrying a stock of various lengths of guides, it is possible to convert standard sockets into sockets with extension guides, making it unnecessary to carry a stock of completed sockets with various lengths of chain guides attached. The hole in the husk need not be more than 16 inch. The portion of the extension chain guide which is attached to socket extends less than  $\frac{1}{6}$  inch outside of socket shell, making it possible to insert the socket in any husk, no matter how closely it follows the outline of shell. Extension chain guides of following lengths furnished from stock:  $\frac{1}{6}$ ,  $\frac{1}{6}$ ,  $\frac{1}{6}$ , and  $\frac{1}{6}$  inches. Additional list price either assembled on sockets or loose, 29 cents; to Mfrs. List, 12 cents. Standard package quantity, 50 of one length or 100 of assorted lengths. Sockets with extension chain guides may not be combined with sockets having regular chain guides to make up a standard package quantity. dard package quantity

Pull Sockets with Chains of Special Lengths

The standard length of chain on all pull sockets, except miniature and candelabra is 8 inches. Sockets with chains shorter than 8 inches will be billed at the same price as regular. For sockets with chains longer than 8 inches, add to list price per foot, 24 cents; to Mfrs. List, 10 cents. For special finishes on chains longer than 8 inches, add to list price per foot 5 cents; to Mfrs. List, 2 cents.

Pull Sockets with Silk Cord

Pull sockets can be furnished with silk cord in any desired color instead of chain. For sockets with cords not longer than 8 inches, add to list price 12 cents; to Mfrs. List, 5 cents.

For sockets with cords longer than 8 inches, add to list price per foot, 36 cents; to Mfrs. List, 15 cents.

Pull Sockets with Linen Cord

Pull sockets can be furnished with a short chain and 3 feet of linen cord, complete with ball, similar to that regularly furnished with pull switch rosettes without extra charge. For cords longer than 3 feet, add to list price per foot, 3 cents; to Mfrs. List, 1 cent.

Pull Sockets with Insulated Chain

Pull sockets can be furnished with insulated chain accomplished by inserting a piece of fiber rod in the chain about 2 inches below the chain guide. For sockets so

equipped add to the list price, 36 cents; to Mfrs. List, 15 cents.

The standard package quantity will be the same as for the Standard socket in connection with which the insulated chain is ordered by the standard socket in control which the insulated chain is ordered by the standard socket in control which the insulated chain is ordered by the standard socket in control which is the standard socket in control with which the insulated chain is ordered by the standard socket in control with the insulated chain is ordered by the standard socket in control with the s

National Electrical Code Standard.



with

Insulated

Chain

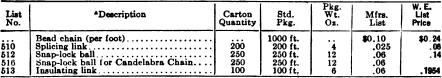
## SPECIAL FEATURES FOR SOCKETS—Continued

Pull Socket Chain and Parts





No. 512



Standard finish on the above is brush or old brass, which will be supplied when no other finish is specified. All other finishes will be special and will be charged extra as follows: Chain, \$0.05 list per foot; Mfrs. List \$0.02; balls and links, \$0.05 each list. Mfrs. List \$0.02.

All New Wrinkle and Wrinklet Pull Sockets are supplied with the No. 512 Ball listed above. It may be detached and attached with the utmost ease, when necessary, but cannot be detached by any strain to which it will be subjected in service, no matter how severe.

Chain Guides

The Standard chain guide, when sold separately from the socket, will list at \$0.12. Mfrs. List \$0.05. Standard package, 250. Extension chain guides described on the opposite page, when sold separately, will list at \$0.29. Mfrs. List \$0.12. Standard package, 50 of one length or 100 of assorted lengths. For special finishes on chain guides, add to list price \$0.05. Mfrs. List \$0.02.

Sockets for gas filled lamps must be waxed with a compound which will not soften under heat. The Mogul base sockets listed are regularly so made. For medium base sockets to be used with gas filled lamps, add to list price \$0.07. Mfrs. List \$0.03.

All Mogul base sockets and most medium base sockets listed in this Bulletin can be equipped with a lamp grip, which effectually prevents the lamp from accidentally unscrewing. For sockets so equipped, add to list price \$0.12. Mfrs. List \$0.05.

Socket Caps with Special Bushings
Most caps of brass shell sockets can be furnished with insulated bushing, as illustrated. of this construction is to provide a passage for the conductors when the support for the socket is a rod instead of a pipe or tube. For sockets so equipped, add to list price \$0.05. Mfrs. List \$0.02.

Sockets and Receptacles in Special Finishes

No. 513

It is of great advantage to the electrical trade to be able to obtain on short notice sockets in various Socket Cap with

Special Bushing

To meet the demand for this class of goods we are now carrying in stock sockets in special finishes.

To meet the demand for this class of goods we are now carrying in stock sockets in special finishes for which there is a large demand, such as polished brass. oxidized copper. polished nickel. etc.

In placing orders for special finishes which are not standardized, we suggest the submitting, at the same time, of a sample for our information.

LIST OF SPECIAL FINISHES

for our information.

LIST OF SPECIAL FINISHES

The standard finish of all brass shell sockets is brush brass, which will be supplied where no finish is specified.

Regular and special finishes of one List No. may be assorted to make up standard package quantity which will be the same as though all were regular finish.

List poince for device he want the same as though all were regular finish.

List prices for devices bought knocked down will be as follows: For caps and bases, one half the list given in column A. For bodies, deduct from lists in columns A, B, C or D, one half the list for the same finish in column A.

the mar for the same must	bu in column	46.		B				D
	A	١	Kev and	Keyless		C	Pull Soc	kets and
	Key and	Kaulee	Sockets		Dull Q	ckets and		I Sockets
<b>Finis</b> h	Socket		Sockets w			all Sockets	with Sha	de-Holder
	Wall S	ockets	Holder A	Attached	Add	to List	Atta	ched
	Add to		Add t					o List
					***	356 71.	Auu i	O LIBU
	W. E. List	Mírs. List	W. E. List	Mirs. List	W. E. List	Mfrs. List	W. E. List	Mírs. List
D 67 1	\$0.05	\$0.02	\$0.10	\$0.04	\$0.07	\$0.03	\$0.12	\$0.05
Barff, bauer								
Brass, antique	· .16	.04	.14	.06	. 24	. 10	. 29	. 12
Brass, brush	Noadvance	No advance	No advance	No advance	Noadvano	e No advance	No advance	Noadvance
Brass, Flemish	.10	.04	.14	.06	. 24	.10	.29	.12
		.04		.06	.24		.29	. 12
Brass, lemon	.10		.14			. 10		
Brass, old	Noadvance	No advance	No advance	No advance		e No advance	Noadvance	Noadvance
Brass, oxidized	.10	.04	.14	.06	. 24	.10	.29	. 12
Brass, polished						e No advance		Noedvence
Bronze, acid	.14*	.06	.19*	.08	. 24	.10.	.29	. 12
Bronze, antique	.14*	.06	.19*	.08	. 24	.10	. 29	.12
Bronze, English	.14*	.06	.19*	.08	. 24	.10	.29	. 12
	.14*	.06	.19*	.08	.24	iŏ	.29	. 12
Bronze, gold							.20	
Bronze, hardware	.14*	.06	.19*	.08	. 24	.10	.29	. 12
Bronze, Japanese	.14*	.06	.19*	.08	. 24	.10	.29	.12
Bronze, old English	.14*	.06	.19*	.08	. 24	.10	.29	.12
	14*	.06	. 19*	.08	.24		.29	.12
Bronze, polished						.10		
Bronze, Pompeiian	.14*	.06	.19*	.08	.36	.15	.41	.17
Bronze, statuary	.10	.04	.14	.06	. 24	.10	. 29	. 12
Copper, acid	.10	.04	.14	.06	.24	.10	.29	.12
					.24			. 12
Copper, antique	.10	.04	.14	.06		.10	.29	
Copper, mottled	.10	.04	.14	.06	. 24	. 10	.29	.12
Copper, old	.10	.04	.14	.06	. 24	. 10	. 29	. 12
Copper, oxidized	.10	.04	.14	.06	.14	.06	.19	.08
Copper, polished	.10	.04	.14	.06	. 24	.10	. 29	. 12
Enamel, white	.14*	.06	.19*	.08	. 24	.10	.29	.12
Gilt, burnished	.14*	.06	.19*	.08	. 24	. 10	. 29	. 12
Gilt, Etruscan	.14*	.06	.19*	.08	.24	.10	.29	.12
Gilt, Ormolu	.14*	.06	.19*	.08	. 24	. 10	. 29	. 12
Gilt, polished	.05	02	.10	.04	.07	.03	.12	.05
Gilt, rich	.05	.02	.10	.04	. 07	.03	.12	. 05
Cald Damen	.14*	.06	.19*	.08	.24	.15	.41	.17
Gold, Roman								
Gold, satin	.14*	.04	.19*	.08	. 24	. 15	.41	. 17
Gun metal	.14*	.06	.19*	.08	. 24	. 15	.41	. 17
Iron, wrought	.05	.06	.10	.04	.07	.03	.12	.05
	.14*	.06	.19*	.08	.24	.10	.29	.12
Nickel, brush								
Nickel, polished	10	.04	.14	.06	.14	.06	.19	.08
Sand blast, any	.14*	.06	.19*	.08	.36	.15	.41	. 17
Silver, butler's	.14*	.06	.19*	.08	.36	.15	.41	. 17
onver, Dutier s	.14*	.06	.19*	.08	.36	.15		. 17
Silver, ground							.41	
Silver, oxidized	.14*	.06	.19*	.08	.36	. 15	.41	. 17
Silver, polished	.14*	.06	.19*	.08	.36	. 15	. 41	. 17
	14*	.06	.19*	.08	.24	. 10	.29	. 12
Steel, polished			.19*					
Verde-antique	.14*	.06		.08	. 38	.15	.41 ⊤	. 17
		0-4-1	. NT 1		12.4 . *11.1	1 1 000	$\alpha \alpha \alpha \alpha$	

\*When ordered in lots of 500 of one Catalogue No. and one finish, this list will be reduced \$0.05.

Wiring Devices

## "NEW WRINKLE" SOCKETS



No. 10 250 Watts, 250 Volts



660 Watts, 250 Volts





















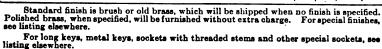








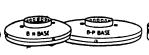




\*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

National Electrical Code Standard.















SP Key Socket



		-	LUJ L	CLEGE		1	IV6A:	C88 D	OCKEL	
Description	List No.	Car	Std Pkg	Mfrs. List Com-	W. E. List	List		Std	Mfrs. List Com-	
		1	1 -	plete	piete				plete	plete
Body, without cap or base.	10	25	500	\$0.26	80 82	13	25	500	00.00	-
With 1/2 in. cap	I AA-10	25	500	.33	.79	AA-13	25	500	\$0.23 .30	
IWith 1/2 in. cap	I AB-10	25		.42	1.01	AB-13	25	250	.39	
I WILD % ID. CAD	1 AC~10	25	250	.39		AC-13	25	250	.36	.87
With 1/2 in. cap	AD-10	25	250	.45	1.08	AD-13	25	250	.42	1.02
With 1/2 in male cap	AE-10 AF-10	25 25	500 250	.33	.79 1.01	AE-13 AF-13	25 25	500	.30	.73
With in male cap	AG-10	25	250	.42	1 i oi	AG-13	25	250 250	.39	
IWith 16 in, male cap	I AH-10	25	250	.48	l i 15	AH-13	25	250	.45	
I With 1/2 in. fixture cap	I AK-10	25	250	.39	.94	AK-13	25	250	36	
With 1/2 in. fixture cap	AL-10	25	250	.42		AL-13	25	250	.39	
With 1/2 in angle cap	AM-10 AN-10	25 25	100	.38	. 91	AM-13	25	100	.35	
With 1/2 in. angle cap With 1/2 in. angle cap	AP-10	25	100	.47		AN-13 AP-13	25 25	100	.44	
With in angle fixture cap	AR-10	25	liŏŏ	.47	1.05	AR-13	25	100	.41	
tWith ¼ in. angle fixture cap	AS-10	25	liŏŏ	.47		AS-13	25	100	:44	
With pendant cap	AT-10	25	500	.33	.79	AT-13	25	500	.30	
I With strain relief cap	AU-10	25	500	.33		AU-13	25	500	.30	.73
With attachment plug	AV-10	10	50	.53		AV-13	10	50	.50	
With cleat base	AW-10 AX-10	10 10	250 250	.49		AW-13 AX-13	10 10	250	.46	
With small concealed base.	AY-10	liŏ	250	344		AY-13	10	250 250	.41	.98 .98
With large concealed base	AZ-101		250		1 17	AZ-13	iŏ	250	.46	
With angle concealed base.	BA-10	10	100	.49	1.17	BA-13	īŏ	100	.46	
tWith base for 36 and 36 in.	20.00	۱.,	L	اا	ـ ـ ـ ـ ا	<b>  _</b>	۱	l		
twith base for 1/2 in. con-	BC-10	10	250	.49	1.17	BC-13	10	250	.46	1.10
dulets	BX-10	10	250	40	1.17	BX-13	10	250	.46	1.10
With base for 1/2 and 1/4 in.	D.1.	١.٠	1		• • • • •	DA-13	١.٠	200	. **0	1.10
taplets	BW-10	10	250	.49	1.17	BW-13	10	250	.46	1.10
With wood molding base	BB-10	10	250	.44	1.06	BB-13	10	250	.41	.98
With one way National	BD 10	١.,		اندا					ا ا	
twith two way National	BD-10	10	250	.44	1.05	BD-13	10	250	.41	.98
base	BE-10	10	250	.44	1.05	BE-13	10	250	.41	.98
With small covered base	BH-10	10	250		1.29	BH-13		250	.51	
With large covered base	BK-10	10	100	.63		BK-13	10	100	.60	1.44
With 31/4 in box base	BL-10	5	100		1.51	BL-13		100		1.44
With 4 in. ox base	BM-10 BN-10	1 5	100 100	.93	2.23 1.75	BM-13	1	100		2.16
With 4 in. pancake base	BP-10	ı	100	1.03	2.47	BN-13 BP-13	5 1	100 100	1.00	1.68 2.40
With concealed rosette base	BR-10	1ô	100	7.75	1.80	BR-13	10	50	72	1.72
!With cleat rosette base	BS-10*		100		1.80	BS-13*	10	50	.72	1.72
With 2 wire molding										
rosette base	BT-10	10	100	.75	1.80	BT-13	10	50	.72	1.72
With 3 wire molding rosette base	BU-10	10	100	75	1.80	BU-13	10	50	70	1 90
With combination rosette	20-10	10	100	9	1.60	DU-13	10	ου	.72	1.72
base	BV-10	10	100	.75	1.80	BV-13	10	50	.72	1.72
With cleat base covered										- · · ·
connections	BY-10	5	50	.68	1.63	BY-13	. 5	50	. 64	1.53
With canopy tap base	B <b>Z</b> -10	10	20	.54	1.29	B <b>Z</b> -13	10	20	. 50	1.20





6000000 B-C BASE Day

B-X BASE 1/451

BBBAS



400000

## **NEW "WRINKLE" SOCKETS**



No. 32. Keyless Socket with Spartan Outlet. Each Outlet 660 Watts, 250 Volte



No. 31. O. T. Key Socket with Spartan Outlet. Each Outlet 660 Watts, 250 Volts

























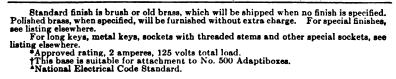






B1 BASE

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2.01 1.68











Key and Keyless Soc	kets Schedule "B"
Keyless Socket With Spartan Outlet	Q. T. Key Socket With Spartan Outlet
Mfrs. W. E.	Mfrs. W. E.

						1 ~					
				Mfrs.	W. E.		1	ī	Mfra	W. E.	
				List	List	i	t t	1	List	List	
`	List	Car-	Std.	Com-	Com-	List	Car-	Std	Com-	Com-	
Description	No.		Pkg.		plete	No.	ton	Pkg	plete	plete	
	32	10	100	\$0.48			10	100	\$0.51		
Body, without cap or base.						31			50.50	1.39	
With 1/2 in. cap	AA-32	10	100	.50		AA-31	10	100	67		
With in cap	AB-32	10	50	.64		AB-31	10	50	.64		
With in cap	AC-32	10	50	.61		AC-31	10	50	.70		
With in cap	AD-32	10	50	.67		AD-31	10	50	.58		
with 1 in. maie cap	AE-32	10	50	.55		AE-31	10	50	1 .67		
- With 21 in. maie cab	AF-32	10	50	.64		AF-31	10	50	.67		
With % in. male cap	AG-33	10	50	.64		AG-31	10	50			
With 1/2 in. male cap	AH-32	10	50	.70		AH-31	10	50	.73		
With % in. male cap With % in. male cap With % in. fixture cap	AK-32	10	50	.61		AK-31	10	50	.64		
-with 1/2 in. nxture cap	AL-32	10	50	.64	1.53	AL-31	10	50	.67		
Mith ⅓ in. angle cap	A M-32	10	50	.60		AM-31	10	J 50	.63		
With 1/2 in angle cap	A N-32	10	50	.69		AN-31	10	50	.72		
With in angle cap	AP-32	10	50	.66		AP-31	10	50	.69		
With 1/2 in. angle fixture cap	AR-32	10	50	.66		AR-31	10	50	.69		
With 1/4 in. angle fixture cap	A8-32	10	50	.69		AS-31	10	50	.72		
With pendent cap	AT-32	10	50	.55		AT-31	10	50	.58		
With strain relief cap	AU-32	10	50	. 55	1.32	AU-31	10	50	.58		
With attachment plug	AV-32	10	50	.75		AV-31	10	50	.78		
With cleat base	AW-32	10	50	.71	1.70	AW-31	10	50	.74		
With slotted base	AX-32	10	50	.66	1.58	AX-31	10	50	.69		
*With small concealed base.	AY-32	10	50	.66	1.58	AY-31	10	50	.69		
With large concealed base.	AZ-32†	10	50	.71	1.70	AZ-31†	10	50	.74		
With angle concealed base.	BA-32	10	50	.71	1.70	BA-31	liŏ	50	.74	1.77	
With base for 36 and 1/2 in.		1							ŀ		
condulets	BC-32	10	50	.71	1.70	BC-31	10	50	.74	1.77	
With base for 1/4 in. con-		1		1							
dulets	BX-32	10	50	.71	1.70	BX-31	10	50	.74	1.77	
With base for 1/2 and 3/4 in.			1			2		"	i		
taplets	BW-32	10	50	.71	1.70	BW-31	10	50	.74	1.77	t
*With wood moulding base.	BB-32	īŏ	50	.66		BB-31	liŏ	50	.69	1.66	1
With one-way national base	BD-32	īŏ	50	.66		BD-31	liŏ	50	.69		
With two-way national base	BE-32	iŏ	50	.66		BE-31	liŏ	50	.69		
With small covered base.	BH-32	iŏ	50	.76		BH-31	liŏ	50	.79		
With large covered base	BK-32	iŏ	50	.85		BK-31	liŏ	50	.88		,
With 31/2 in. box base	BL-32	-5	50	.85		BL-31	iŏ	5ŏ	.88	2.10	l
With 4 in. box base	BM-32	ĭ	50	1.15		BM-31	iŏ	50	1.18		•
With 31/2 in. pancake base.	BN-32	5	50	.95		BN-31	lδ	50	.98		
With 4 in. pancake base	BP-32	ĭ	50	.25	.60	BP-31	l ĭ	50	1.28	3.07	
With concealed resette base	BR-32	10	50	.97	2.33	BR-31	ŝ	50	1.00		1
With cleat rosette base	BS-32*	10	50	.97	2.33	BS-31*	i	50	1.00	2.40	•
	DO-32	10	ου	. 5 4	اس. د	DO-91	1	80	1.00	2.40	
With 2 wire moulding ro-	BT-32	10	50	.97	2.33	BT-31	10	E0.	1.00	2.40	
sette base	D1-32	10	1 90		2.33	D1-31	10	50	1.00	4.40	
With 3 wire moulding ro-	BU-32	امدا	50	.97	2.33	DII 21	ا ۱۰۰	E0.	1.00	2.40	
sette base	೨೦-32	10	ρυ	. 91	2.33	BU-31	10	50.	1.00	4.40	
With combination resette	DV 00	ا ۱	-	.97	2.33	D17 01	ا ہے ا		1.00	2.40	
base	BV-32	10	50	.87	2.33	BV-31	10	50	1.09	2.40	
With cleat base, covered	777 00	- 1			2.01		ا ـ ا		.87	2.08	
connections	BY-32	5	50	.84	2.UI	BY-31	5	50	.04	2.U0	

BZ-32 | 10



B-D BASI

400000a BC BASE (व्य B-X BASE

(10000p



connections.....

\*With canopy tap base.....



#### **NEW "WRINKLE" SOCKETS**



High Capacity Pull Socket, 660 Watts, 250 Volts



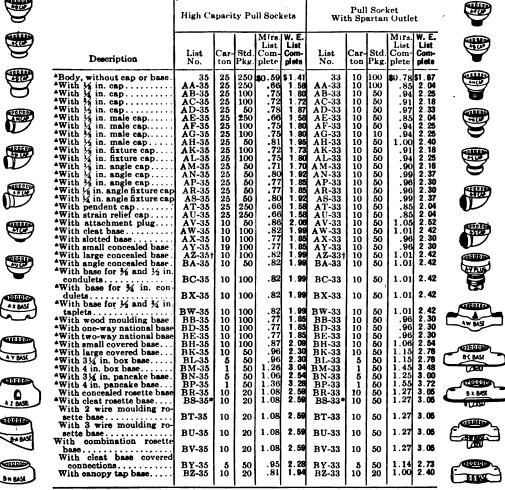
Pull Socket with Spartan Outlet Socket Outlet, 250 Watts, 250 Volts Spartan Outlet, 660 Watts, 250 Volts



#### New "Wrinkle" Pull Sockets

Schedule "B"







COORD S B & BASE

Standard finish is brass or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge. For special finishes, see listing elsewhere.

see Insting eisewhere.

Sockets regularly furnished with 8 inches of chain. For extra chain, cord instead of chain, extension chain guides, etc., see listing elsewhere.

\*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

\*National Electrical Code Standard.







8-D BASI















## "NEW WRINKLE" SOCKETS

DP and QT Key Sockets

DP Key Socket

500

500 500

50 250

250 250 250

250

100

100

100

25 25 100

25 25

25

10

10

10

10 100

10 250

10 250

10

10

10

5

5 100

10 100

10

10 100

10 100

10 20

List

AA-11 AB-11 AC-11

AD-11 AE-11 AF-11

AG-11

AH-11

AK-11 AL-11

AM-11 AN-11 AP-11

AR-11 AS-11 AT-11 AU-11 AV-11 AW-11 AX-11 AY-11 AZ-11

BA-11

BC-11

BX-11

BW-11

BB-11 BD-11 BE-11 BH-11

BK-11 BL-11

BM-11 BN-11 BP-11

BR-11 BS-11

BT-11

BU-11

BV-11

BZ-22

Car-Std. Mirs. W. E. List List Com-Com-

plete plete

\$0.26 \$0.62

.42

.42

.48

.39 1.01 .42

.38 92 1.14 .47

.44

.44

.33 .79

.53 28

.44 1.06

.44

.49

.49 1.18

.49 1.18

.49 1.18

.44 .44 .54 .63 1.06 1.06 1.06 1.30

.93

.75

.75

.75 1.80

.62 1.48

.73 1.03

1.52 1.52 2.24 1.76 2.48 1.80 1.80

1.80

1.80

.33 .79 .42 1.01 .39 .94

1.08 .45

1.01

1.01

1.06

79



No. 11 250 Watte, 250 Volte

Description

Body, without cap or base.
With 1/8 in. cap.
With 1/4 in. cap.
With 3/8 in. cap.

Body, without cap or base.
With ½ in. cap.
With ½ in. male cap.
With ½ in. male cap.
With ½ in. male cap.
With ½ in. male cap.
With ½ in. fixture cap.
With ½ in. fixture cap.
With ½ in. angle cap.
With ¼ in. angle cap.
With ¼ in. angle cap.
With ¼ in. angle cap.
With ¼ in. angle cap.
With ¼ in. angle fixture cap
With ¼ in. angle fixture cap
With strain relief cap.
With strain relief cap.
With strain relief cap.
With strain relief cap.
With stotted base.
With small concealed base.
With small concealed base.

With small concealed base

With large concealed base. With angle concealed base.

With base for 3/8 and 1/2 in

condulets.

With base for ¾ in. condulets.

With base for 1/2 and 3/4 in.

With one way.
With two way National base.
With small covered base.
With large covered base.
With 3½ in. box base.
With 3½ in. box base.
With 3½ in. pancake base.
With 3½ in. pancake base.
With concealed rosette base.
With concealed rosette base.

With cleat rosette base....
With 2 wire molding rosette

With 3 wire molding rosette

With combination rosette

No. 12

List

No.

AA-12 AB-12 AC-12 AD-12 AE-12 AF-12 AG-12

AG-12 AH-12 AK-12 AL-12 AM-12 AN-12

AP-12 AR-12

AR-12 AS-12 AT-12 AU-12 AV-12 AW-12

AX-12 AY-12 AZ-12† BA-12

BC-12

BX-12

BW-12 BB-12 BD-12 BE-12 BH-12

BK-12 BL-12

BM-12 BN-12

BP-12

BR-12

BS-12

BT-12

BU-12

BV-12

BZ-10























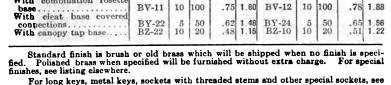








B-L BASE



50

\*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

INational Electrical Code Standard.



660 Watts, 250 Volts

Schedule "B"

Car-Std. List List ton Pkg. Com-Com-

pleteniete

\$0.29 \$0.70

.48 .36 88

.45

.45 1.24 1.01 1.01 1.08

.42

.41 .50 .47 .47

.36 .36 .56

.47 .47 .52 .52

.52

.47 .47 .47 .57 1.14 1.14 1.14 1.38

.76 1.06 .78 .78

.78 1.88

.78

.78

.65 .51

.36 .88 .45 1.08 .42 1.01

1.08

1.00 1.20 1.14 1.14

.88

88

1.36

1.26 1.14 1.14 1.26

1.26

1.26

1.60 1.60 2.32 1.84 2.56 1.88 1.88 .66 .66

1.88

1.88

.52 1.26

QT Key Socket

250

 $250 \\ 250 \\ 250 \\ 250 \\ 250$ 

250

100 100

100

100

100

10 10

10

10

10 250

10

10

10

10

10

10 100

10 100

10 100

10











































listing elsewhere.

#### "NEW WRINKLE" SOCKETS







No. 15 **250** Watts, 250 Volts







	7	Curn	Sock	eta		1	Pull S	Bocke	ts		
Description	List No.		Std.	Mfrs. List Com- plete	List Com-	List No.			Mfrs. List Com- plete	List Com-	
Body, without cap or base.  With \( \) in. cap.  With \( \) in. male cap.  With \( \) in. male cap.  With \( \) in. male cap.  With \( \) in. male cap.  With \( \) in. fixture cap.  With \( \) in. fixture cap.  With \( \) in. angle fixture cap.  With \( \) pendent cap.	AS-14 AT-14	25 25 25 25 25 25 25 25 25 25 25 25 25 2	100 50 50 50 50 50 50 50 50 50 50 50 50 5	.69 .66 .72 .60 .69 .69 .65 .74 .71 .71	1 44 1 86 1 60 1 74 1 44 1 66 1 80 1 80 1 86 1 78 1 72 1 72 1 72 1 78	AB-15 AC-15 AE-15 AF-15 AF-15 AH-15 AK-15 AM-15 AN-15 AN-15 AR-15 AR-15	25 25 25 25 25 25 25 25 25 25 25 25 25 2	250 250 100 100 50 250 100 100 50 100 50 50 50 50 50 250	.69 .66 .72 .60 .69 .69 .65 .65 .71 .71	1.44 1.66 1.60 1.74 1.44 1.66 1.66 1.80 1.66 1.78 1.78 1.72 1.72	
With strain relief cap. With attachment plug. With cleat base. With slotted base. With small concealed base. With large concealed base. With angle concealed base. With base for % and ½ in condulet. With base for ¾ in. con-	AU-14 AV-14 AW-14 AX-14 AY-14 AZ-14† BA-14 BC-14	25 10 10 10 10 10 10	50 20 20 20 20 20 20 20	.60 .86 .76 .71 .71 .76 .76	1 44 1 92 1 84 1 72 1 72 1 84 1 84	AU-15 AV-15 AW-15 AX-15 AY-15 AZ-15† BA-15 BC-15	25 10 10 10 10 10 10	250 50 100 100 100 100 50	.60 .80 .76 .71 .71 .76 .76	1.44 1.92 1.84 1.72 1.72 1.84 1.84	
dulets.  With base for ½ and ¾ in taplets.  With wood molding base.  With one way National base with two way National base with small covered base.  With large covered base.  With 3¼ in. box base.  With 4 in. box base.  With 3½ in. pancake base.  With 4 in. pancake base.  With 4 in. pancake base.  With concealed rosette base with cleat rosette base.  With 2 wire molding rosette	BE-14 BH-14 BK-14 BL-14 BM-14 BN-14 BP-14 BR-14 BS-14*	10 10 10 10 10 10 10 5 1 10 10	20 20 20 20 20 20 20 20 20 20 20 10	.76 .71 .71 .71 .81	1 72 1 72 1 72 1 96 2 16 2 16 2 88 2 40 3 12 2 46	BW-15 BB-15 BD-15 BE-15 BH-15 BK-15 BM-15 BN-15 BP-15 BR-15	10 10 10 10 10 10 10 5 1 1 10 10	100 100 100 100 100 50 50 50 50 20	.71 .71 .71 .81	1 84 1 72 1 72 1 72 1 72 1 96 2 16 2 2 16 2 2 88 2 2 40 3 12 2 2 46	
base With 3 wire molding rosette base With combination rosette base With cleat base covered	BT-14 BU-14 BV-14	10 10 10	10 10 10	1.02 1.02 1.02	2.46 2.46	BU-15 BV-15	10 10 10	20 20 20	1.02 1.02	2.48	•
With canopy tap base	BY-14 BZ-14	10	50 20	.89 .75			10 10	50 20	.89		•

Standard finish is brush or old brass, which will be shipped when no finish is specified Polished brass when specified will be furnished without extra charge. For special finishes see listing elsewhere.

- \*Approved rating 2 amperes, 125 volts.
- †This base is suitable for attachment to No. 500 Adaptiboxes.
- 1 National electrical code standard.



B-D BASE

B-X BASE













BH BASE

BH BASE

B-L BASE

## "NEW WRINKLE" SOCKETS







No. 17 Bottom Outlet, 250 Watts, 250 Volta Side Outlet, 660 Watts, 250 Volta







Schedule "B"

Donalistian	Both (		ts Op	ocket erate on neously	ļ	Side Out		lla n	tet the Time and Off	:	HG.
<b>Des</b> cription	List No.		Std. Pkg.	Mfrs. W List L Com-Co plete pi	ist m-	List No.			Mfrs. W. List Lic Com-Cor plete ple	st M-	1988
Body, without cap or base With 16 in. cap With 16 in. cap	16 AA-16 AB-16	10 10 10	20 20	\$1.08 1.15 1.24 1.21 2	.78	AA-17 AB-17	10 10 10	20 20	\$1.08 \$2. 1.15 2. 1.24 2.	78 98	
With 1/2 in. cap	AC-16 AD-16 AE-16 AF-16 AG-16	10 10 10 10	20 20 20 20 20 20	1.27 3 1.15 2 1.24 2	.06 .76 .98	AC-17 AD-17 AE-17 AF-17 AG-17	10 10 10 10	20 20 20 20 20	1.21 2. 1.27 3. 1.15 2. 1.24 2. 1.24 2.	06 76 98	
With 1/4 in. male cap With 1/4 in. fixture cap With 1/4 in. fixture cap	AH-16 AK-16 AL-16 AM-16	10 10 10 10	20 20 20 20 20	1.30 3 1.21 2 1.24 2	92 98 88 10	AH-17 AK-17 AL-17 AM-17	10 10 10 10	20 20 20 20	1.30 8. 1.21 2. 1.24 2. 1.20 2	12 92 98 88	
With in angle cap With in angle cap With in angle fixture cap. With in angle fixture cap.	AN-16 AP-16 AR-16 AS-16	10 10 10 10	20 20 20 20	1.26 3 1.26 3 1.29 3	.04 .04 .10	AN-17 AP-17 AR-17 A8-17	10 10 10 10	20 20 20 20	1.29 3. 1.26 3. 1.26 3. 1.29 3.	10 04 04 10	
With pendant cap With strain relief cap With attachment plug With cleat base	AT-16 AU-16 AV-16 AW-16	10 10 10 10	20 20 20 20 20	1.15 2 1.35 3 1.31 3	76 78 24 16	AT-17 AU-17 AV-17 AW-17	10 10 10 10	20 20 20 20	1.15 2. 1.15 2. 1.35 3. 1.31 3.	76 24 16	WAU
With shotted base	AX-16 AY-16 AZ-16* BA-16	10 10 10 10	20 20 20 20	1.31 3	.04 .04 .16 .16	AX-17 AY-17 AZ-17* BA-17	10 10 10 10	20 20 20 20	1.26 3. 1.26 3. 1.31 3. 1.31 3.	04 16	
With base for ¾ and ¾ in. condulets	BC-16 BX-16	10 10	20 20	1.31 3	18	BC-17 BX-17	10 10	20 20	1.31 1.31 3.	16	AW BASE
with wood molding base. With one way National base. With two way National base	BW-16 BB-16 BD-16 BE-16	10 10 10	20 20 20 20 20 20	1.26 3 1.26 3 1.26 3	16	BW-17 BB-17 BD-17 BE-17 BH-17	10 10 10 10	20 20 20 20 20	1.31 3. 1.26 3. 1.26 3. 1.26 3.	04 04 04	BY BASE
With small covered base With large covered base With 3½ in. box base With 4 in. box base	BH-16 BK-16 BL-16 BM-16 BN-16	10 10 5 1 5	20 20 20 20 20	1.45 3 1.45 3 1.75 4	28 48 48 20 72	BK-17 BL-17 BM-17 BN-17	10 5 1 5	20 20 20 20 20	1.36 3. 1.45 3. 1.45 3. 1.75 4. 1.55 3.	48 48 20	BY BYZ
With 3½ in. pancake base With 4 in. pancake base With concealed rosette base. With cleat rosette base With 2 wire molding rosette	BP-16 BR-16 BS-16	1 10 10	20 10 10	1.85 4. 1.57 3	78 78	BP-17 BR-17 B8-17†	1 10	20 10 10	1.85 4. 1.57 3. 1.57 3.	44 78	
base	BT-16 BU-16	10 10	10 10	1	.78 .78	BT-17 BU-17	10 10	10 10	1.57 3. 1.57 3.	78 78	- COULD -
base	BV-16 BY-16 BZ-16	10 5 10	10 50 20	1.44 3.	.78 .89 .65	BV-17 BY-13 BZ-17	10 5 10	10 50 20	1.57 3. 1.44 3. 1.30 3.	89	
Standard finish is brush				<u>! !</u>	_!				<u> </u>	_	60 84X

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be furnished without extra charge. For special finishes, see listing elsewhere.

Sockets are regularly furnished with 8 inches of chain. For extra chain, cord instead of chain, extension chain guides, see listing elsewhere.

\*This base is suitable for attachment to No. 500 Adaptiboxes.

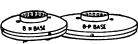
†Approved rating 2 amperes, 125 volts.





B-K BASE

40000 B-L BASE











B-E BASE

## "NEW WRINKLE" ROSETTES



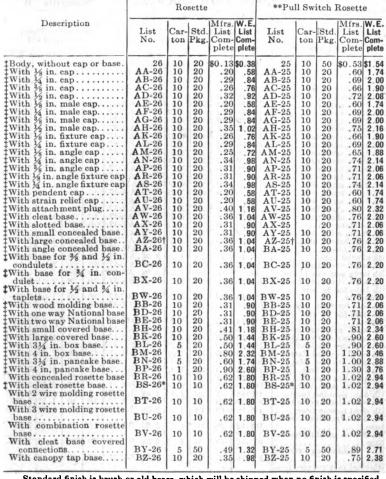
3 Amperes, 250 Volts



No. 25 1 Ampere, 250 Volte 3 Ampere, 125 Volta

## Rosette and Pull Switch Rosette

Schedule "H"



Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass when specified will be furnished without extra charge. For special finishes,

ronshed brass when specined will be turnished without extra charge. For special innishes, see listing elsewhere.

\*\*Bodies are regularly furnished with short chain and 10 feet of best quality linen cord. Extra cord 2 cents list per foot. For extension chain guides, insulated chain, etc., see listing elsewhere.

\*Approved rating 2 amperes, 125 volts.
†This base is suitable for attachment to No. 500 Adaptiboxes.
‡National Electrical Code Standard.













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B-C BASE

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B-X BASE

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B-D BASE

B E BASE



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BH BASE

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B-K BASE

COULDE B-L BASE

## "NEW WRINKLE" SWITCHES



No. 18 3 Amperes, 125 Volts 1 Ampere, 250 Volte



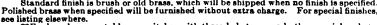
No. 19 3 Amperes, 125 Voits 1 Ampere, 250 Volts



## Key and Pull Wall Switches

Schedule "H"

Ì	** K	††Pull Wall Switch								
Description	List No.	Car- ton	Std. Pkg.	Mfrs. List Com- plete	List Com-	List No.		Std. Pkg.		List Com-
dy, without cap or base.	18	10		\$0.26		. 19	10	50	\$0.53	\$1.54
th 1/2 in. cap	AA-18	10	50	.33	.96	AA-19	10	50		1.74
th ¼ in. cap th ½ in. cap	AB-18	10	20	.42	1.22	AB-19	10	20	.69	
	AC-18	10	20	.39	1.14	AC-19	10	20	.66	
th 1/2 in. cap	AD-18	10	20	.45	1.30	AD-19	10	20	.72	2.08
th in male cap	AE-18 AF-18	10	20 20	. 33	.98 1.22	AE-19	10	20	.60	
th ¼ in. male cap th ¾ in. male cap	AG-18	10 10	20	.42 .42	1.22	AF-19 AG-19	10 10	20 20	.69 .69	2.00
th ½ in. male cap th ½ in. male cap	AH-18	10	20	.48	1.40	AH-19	iŏ	20	.75	
th 1/2 in. fixture cap	AK-18	iŏ	2ŏ	.39	1.14	AK-19	iŏ	20	.66	
th ¼ in. fixture cap	AL-18	iŏ	20	.42	1.22	AL-19	iŏ	20	.69	
th in angle cap	AM-18	10	20	.38	1.10	AM-19	10	20	.65	1.88
th ¼ in. angle cap	AN-18	10	20	.47	1.38	AN-19	10	20	.74	2.14
th 🏂 in. angle cap	AP-18	10	20	.44	1.38	AP-19	10	20	.71	2.08
th 1/8 in. angle fixture cap	AR-18	10 10	20 20	.44	1.38 1.38	AR-19 AS-19	10	20 20	.71	
th ¼ in. angle fixture cap th pendent cap	AS-18 AT-18	10	20	.47 .33	.96	AT-19	10 10	20	.60	
th strain relief cap	AU-18	liŏ	20	33	.96	ÂÛ-19	iŏ	20	.60	
th attachment plug	AV-18	liŏ	20	.53		AV-19	liŏ	·2ŏ	.80	
th cleat base	AW-18	10	20	.49	1.54 1.42	AW-19	10	20	.76	
th slotted base	AX-18	10	20	.44	1.28	AX-19	10	20	.71	2.08
th small concealed base.	AY-18	10	20	.44	1.28	AY-19	10	20	.71	2.06
th large concealed base	AZ-18†	10	20	.49	1.42	AZ-19†		20	76	
th angle concealed base.	BA-18	10	20	.49	1.42	BA-19	10	20	.76	2.20
th base for ¾ and ½ in.	DC-18	10	20	.49	1.42	BC-19	10	20	.76	2.20
nduletsth base for ¾ in. con-	DC-18	1 **	1 20	.49	1.72	DC-16	1 10	1 20	.,,,	2.20
alet	BX-18	10	20	ا"`` ا	1.42	BX-19	10	20	.76	2.20
th base for 1/2 and 1/4 in.				.49					1	
plets	BW-18	10	20	l	1.42		10	20	.76	
th wood molding base.	BB-18	10	20	.44	1.28	BB-19	10	20	.71	
th one way National base	BD-18 BE-18	10	20 20	.44 .44	1.28	BD-19 BE-19	10	20 20	.71	
th two way National base th small covered base	BH-18	liŏ	20	.54	1.56	BH-19	liŏ	50	.71 .80	2.08 2.34
th large covered base	BK-18	liŏ	20	.63	1.82	BK-19	liŏ	20	.90	
th 3¼ in. box base	BL-18	1 5	20	.63	1.82	BL-19	5	20		2.60
th 4 in. box base	BM-18	1	20	.93	2.68	BM-19	1	20	1.20	3.46
th 31/4 in pancake base.	BN-18	5	20	.73	2.16		5	20	1.00	2.88
th 4 in. pancake base	BP-18	1	20	1.03	2.98	BP-19	1.1	20	1.30	3.78
th concealed resette base	BR-18	10	10	.75	2.16	BR-19	10	10	1.02	
th cleat rosette base th 2 wire molding rosette	BS-18*	10	10	.75 .75	2.16	BS-19*	10	10	1.02	2.94
	BT-18	10	10	1 .73	2.16	BT-19	10	10	1.02	2.94
th 3 wire molding rosette	21-10	١.٠	١.,	.75	٠٩	21-10	١.,	١.٠	۱ *	۳. ا
886	BU-18	10	10	ا" ا	2.16	BU-19	10	10	1.02	2.94
th combination resette		1		.75			1	1	[.	1
ase	BV-18	10	10	l 1	2.16	BV-19	10	10	1.02	2.94
ith cleat base covered		١.	l	. 62	ا ا	<b></b>	١.	۱	۔۔	۔ ۔ ا
onnections	BY-18	5	50	ا م	1.78	BY-19	5	50	.89	
ith canopy tap base	B <b>Z</b> -18	10	20	.48	1.40	BZ-19	10	20	.75	2.56
						1				1



\*\*For long keys, metal keys, switches with threaded stems, and other special sockets, see listing elsewhere.

†\*Bodies are regularly furnished with short chain and 10 feet of best quality linen cord. Extra cord 2 cents list per foot. For extension chain guides, insulated chain, etc.,

cord. Extra cord 2 cents list per 100s. For extended same see listing elsewhere.

\*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

\*National Electrical Code Standard.



B H BASE

B-N BASE

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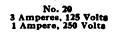


BE BASE

B-D BASI

## "NEW WRINKLE" SWITCHES







No. 27 3 Amperes, 125 Volts 1 Ampere, 250 Volts



#### S. P. Pull and Electrolier Pull Ceiling Switch Schedule "H"

	8. P. P		'ailia	- 5-14	ah	Electi			Ceilin	IE.		
1	5. F. F	un C	emm	g own	,cu	Switch Operating 1, 2, 1 and 2, Off						
Description					Operatii	ng I.	2, 1					
Description		1_	l	Mfrs.			1_	١	Mfrs.			
	List			List	List	List		Std.		List		
	No.	ton	Pkg.	Com-		No.	ton	Pkg.				
•		ı	ł	plete	piete		1	ļ	plete	plete		
Body, without cap or base.	20	10	50	<b>\$</b> 0.53	e1 84	27	10	50	\$0.83	e2 40		
tWith 1/ in one	AA-20	liŏ	50		1 74		liŏ	50		2.60		
With 1/8 in. cap	AB-20	liŏ	20		2.00		liŏ	20		2.86		
With % in. cap	AC-20	liŏ	20	88	1.90	AC-27	iŏ	20	30	2.78		
With 1/2 in. cap	AD-20	liŏ	20	72			liŏ	20	1.02			
With 16 in. male cap	AE-20	liŏ	20	60			liŏ	20	1 . 90			
With 1/4 in. male cap	AF-20	liŏ	20	.69			liŏ	20	.99			
With % in. male cap	AG-20	liŏ	20	.69			liŏ	20	.99			
With ½ in. male cap	AH-20	iŏ	20	75			iŏ	20	1.05			
With 18 in. fixture cap	AK-20	liŏ	20	.66			liŏ	20	1.96			
With 1/4 in. fixture cap	AL-20	liŏ	20	.69			liŏ	20	.99			
With 18 in. angle cap	AM-20	iŏ	ő	65			liŏ	20	.95			
With 14 in. angle cap	A N-20	iŏ	20	74	2 14		liŏ	20	1.04	3 00		
With % in. angle cap	AP-20	liŏ	20	:7i			liŏ	20	1.01	2 92		
With 16 in. angle fixture cap	AR-20	liŏ	20	71			liŏ	20	1.01			
With 14 in. angle fixture cap	AS-20	liŏ	Zŏ	74			iŏ	2ŏ	1.04			
With pendent cap	AT-20	liŏ	20	60		AT-27	liŏ	20	1.90			
With strain relief cap	A U-20	liŏ	20	60			liŏ	20	.90			
With attachment plug	AV-20	liö	20	80			iŏ	20	1.10			
With cleat base	AW-20	liö	20	76		AW-27	liŏ	2ŏ	1.06			
With slotted base	A X-20	liŏ	20	71	2.08	AX-27	iŏ	20	1.01	2 92		
With small concealed base.	A Y-20	liŏ	2ŏ	71	2.08		iŏ	20	l i ŏi			
With large concealed base.	AZ-201		20	76			liŏ	20	1.06			
With angle concealed base.	BA-20	liŏ	20	76			liŏ	20	1.06			
With base for % and ½ in.	DA-20	1 **	ا 20	.,,,	2.20	DA-21	1 40	1 20	1.00	3.00		
condulets	BC-20	10	20	.76	2.20	BC-27	10	20	1.06	3.08		
1With base for 1/2 in. con-	20-20	1 ~~	l = "	1 .,,	1.20	DO-2.	1 -0	1 20	1.00	0.00		
dulat	BX-20	10	20	.76	2.20	BX-27	10	20	1.06	3.08		
dulet	D41-20	1 .0	۳.	۰،۰۰	2.20	D.K-21	1 20	1 -0	1.00	0.00		
taplets	BW-20	10	20	.76	2.20	BW-27	10	20	1.06	3 06		
With wood molding base	BB-20	liŏ	20	:7ĭ	2 08		liŏ	20	1.01	2.92		
With one way National base		liŏ	2ŏ	.7i	2 08		liŏ	20	l î.ŏî	2 92		
Withtwo-way National base	BE-20	liŏ	20	71	2.06		liŏ	2ŏ	l i.ŏi			
1With small covered base	BH-20	liŏ	Zŏ	.81	2.34		liŏ	2ŏ	l î.ĭî			
With large covered base	BK-20	liŏ	2ŏ	90			liŏ	2ŏ	1 20			
With 31/4 in. box base	BL-20	lδ	20	.90			1 5	2ŏ	1.20			
With 4 in. box base	BM-20	Ĭ	20	1.20			Ιĭ	20	1.50			
With 314 in. pancake base.	BN-20	5	2ŏ	1.00			5	20	1.30			
With 4 in. pancake base	BP-20	lĭ	2ŏ	1.30			Ιĭ	20	1.60			
With concealed rosette base	BR-20	10	līŏ	1.02			10	līŏ	1.32	3.80		
With cleat rosette base	BS-20*		liŏ	1.02				iŏ	1.32			
With 2 wire molding rosette	20 20	1	1 -0	] <b>*</b>		20 5.	١.,	١.٠	1.02	0.00		
base	BT-20	10	10	1.02	2.94	BT-27	10	l 10	1.32	3.80		
With 3 wire molding resette		٦٠	1 - 0	I 02	04		١-"	١.,		1		
base	BU-20	10	10	1.02	2.94	BU-27	10	10	1.32	3.80		
With combination resette		ا آ	1 -	1	54	~~ ~.	١	٦,	I	1		
base	BV-20	10	10	1.02	2.94	BV-27	10	10	1.32	3.80		
With cleat base covered	- : -0	٦,	٦٠	1		ı <b></b>	١.,	ا - آ	۰۰۰۰	1 3.00		
connections	BY-20	5	50	.89	2.71	BY-27	5	50	1.19	3.74		
With canopy tap base	BZ-20	l 1ŏ	20		2 38		l ıŏ	1 20		3 45		
Standard Snish is house				hall b	h:	and mhar				God		

Standard finish is brush or old brass, which shall be shipped when no finish is specified. Polished brass when specified will be furnished without extra charge. For special finishes, see listings elsewhere.

Bodies are regularly furnished with short chain and 10 feet of best quality linen cord. Extra cord 2 cents list per foot. For extension chain guides, insulated chain, etc., see PATTER COID 2 CEREBIES POI 100M. For VICTURE 11 isking elsewhere.

\*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

!National Electrical Code Standard.















BC BASE Da

B-X BASE

1000cm

DOM 100 1000

8 0 BAS

600/CB

BE BASE

B H BASE

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B-L BASE

BE BASE

## "NEW WRINKLE" SWITCHES



No. 21 3 Amperes, 125 Volta 1 Ampere, 250 Volta



No. 28 3 Amperes, 125 Volte 1 Ampere, 250 Volts

# S. P. and Electrolier Pull Fixture Switch

							Sc	hed	ule "	<u>H"</u>
	8. P. P	ull F	i <b>xtu</b> r	e Swit	ch	Electi Operati	8	ritch	Fixtur	
<b>Description</b>	List No.	Carton	Std. Pkg.	Mfrs. List Com- plete	List Com-	List No.	Г	i	Mfrs.	W.E. List Com-
‡Body, without cap or base.	21	10	50	\$0.68	\$1.96	28	10	50	<b>3</b> 0.98	\$2.84
‡With ¼ in. cap	AA-21	10	50	.75	2.16	AA-28	10	50	1.05	3.04
With 1/2 in. cap	AB-21 AC-21	10 10	20	.84 81	2.42	AB-28 AC-28	10 10	20 20	1.14	3.30
‡With ⅓ in. cap	AD-21	10	20	.87	2.34 2.52	AD-28	10	20	1.11 1.17	3.38
With in male cap	AE-21 AF-21	10	20	.75	2.16	AE-28 AF-28	10 10	20	1.05	3.24
With in male cap	AG-21	10	20	:84	2.42 2.42	AG-28	iŏ	20	1.14 1.14	
With % in. male cap	AH-21	10	20	1 .90	2.60	AH-28	10	20	1.20	3.46
With 16 in. fixture cap	AK-21	10	20	.81	2.34 2.42	AK-28	10	20	1.11	3.20
With 1/2 in angle cap	AL-21 AM-21	10 10	20	.80	2.32	AL-28 AM-28	10 10	20	1.14 1.10	3.18
With in angle cap With in angle cap	AN-21	10	20	.89	2.32 2.58	AN-28	10	20	l 1.19l	3.44
With % in. angle cap	AP-21 AR-21	10	20 20		2.48 2.48	AP-28 AR-28	10 10	20 20	1.16 1.16	3.34
With 1/2 in. angle fixture cap With 1/2 in. angle fixture cap		10	20	.89	2.58	AS-28	10	20	1.19	3.44
With pendent cap	AT-21	10	20	.75	2.18	AT-28	10	20	1.05	3.04
With strain relief cap With attachment plug	AU-21 AV-21	10 10	20 20		2.18 2.74		10 10	20 20	1.05 1.25	
1With cleat base	AW-21	10	20	.91	2.62	AW-28	10	20	1.21	3.50
With slotted base	AX-21	10	20	.86	2.62 2.48	AX-28	10	20	1.16	3.34
With small concealed base.	AY-21 AZ-21†	10 10	20	.86	2.48 2.62	AY-28 AZ-28	10 10	20 20	1.16 1.21	3.34
With large concealed base With angle concealed base.	BA-21	iŏ	20		2.62		iŏ	20	1.21	
1With base for 1/4 and 1/2 in.			1	1			ł	1	l 1	
twith base for % in. con-	BC-21	10	20	.91	2.62	BC-28	10	20	1.21	3.50
dulet	BX-21	10	20	.91	2.62	BX-28	10	20	1.21	3.50
With base for 1/2 and 1/4 in.		••		1 1					1 1	
taplets	BW-21 BB-21	10 10	20 20	.91	2.62 2.48		10	20 20	1.21 1.16	3.50
With one way National base	BD-21	îŏ	20	.86	2.48	BD-28	iŏ	20	1.16	3.34
With two way National base	BE-21	10	20	.86	2.48 2.80	BE-28	10	20	1.16 1.26	3.34
With small covered base With large covered base	BH-21 BK-21	10 10	20 20	1.05	3.04	BH-28 BK-28	10 10	20 20	1.26	3.70
With 31/4 in. box base	BL-21	5	20	1.05	3 04	BL-28	5	20	1.35	3.70
With 4 in. box base	BM-21	1	20	1.35	3.90	BM-28	ļ	20	1.65	5.78
1With 3½ in. pancake base	BN-21 BP-21	5	20	1.15	3.32 4.18	BN-28 BP-28	5	20 20	1.45	9.18 5.04
With concealed rosette base	BR-21	10	10	1.17	3.38	BR-28	10	10	1.75 1.47	4.24
With cleat rosette base	BS-21*	10	10	1.17	3.38	BS-28*	10	10	1.47	4.24
With 2 wire molding rosette base	BT-21	10	10	1.17	3.38	BT-28	10	10	1.47	4 24
With 3 wire molding rosette		1		1				١.,	1 1	
base	BU-21	10	10	1.17	3.38	BU-28	10	10	1.47	4.24
With combination resette	BV-21	10	10	1 17	3.38	BV-28	10	10	1.47	4 24
With cleat base covered			1	1 1			l		1	
_ connections	BY-21	5	50	1.04		BY-28	.5	50	1.34	
With canopy tap base		10	20		2 88			20	1.20	
Standard finish is brush Polished brass when specified										
ee listing elsewhere.										
Bodies are regularly fur	nished wif	h sh	ort cl	hain ar	d 10	feet of be	est au	ality	linen e	ord.

see using eisewhere.

Bodies are regularly furnished with short chain and 10 feet of best quality linen cord.

Extra cord 2 cents list per foot. For extra chain, insulated chain, etc., see listing elsewhere.

\*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

‡National Electrical Code Standard.

B-1 BASE



## "NEW WRINKLE" SWITCHES



No. 22 3 Amperes, 125 Volts 1 Ampere, 250 Volte



No. 24 3 Amperes, 125 Volta 1 Ampere, 250 Volte



BO BASE

## Key and Pull Candle Switches

Sch	edule	"H"
-----	-------	-----

	**Ke	у Са	ndle	Switch		††Pu	ıll Ca	ndle	Switch	<b>.</b>	41110
Description	List No.	Car- ton		Mírs. List Com- plete	List Com-	List No.		Std. Pkg.		List Com-	
Body, without cap or base.	22	10		\$0.53		24	10		\$0.26	\$1.54	THE CO
With 1/2 in. cap	AA-22 AB-22	10 10	50 20	.60	1.22	AA-24 AB-24	10 10	50 20	.42	1.74	
With in cap	AC-22	10	20	.66	1.14	AC-24	10	20	. 39	1.90	979 P.D
With 1/2 in. cap	AD-22	10	20 20		1.30	AD-24 AE-24	10	20 20	.45		ATTO
With 1/8 in. male cap	AE-22 AF-22	10 10	20	. 60 . 69	1.22	AF-24	10	20	.42	2 00	
With 38 in. male cap	AG-22	10	20	. 69	1.22	AG-24	10	20	.42	2.00	
With 14 in. male cap	A H-22	10	20		1.40	AH-24	10	20	.48		9110
With 1/8 in. fixture cap	A K-22 A L-22	10 10	20 20	. 66 . 69	1.14	AK-24 AL-24	10	20 20	.39	1.90	
With 18 in, angle cap	AM-22	iŏ	20		1.10	AM-24	liŏ	20	.38		
With ¼ in, angle cap	A N-22	10	20	.74	1.38	AN-24	10	20	.47	2.14	GOODE
With % in. angle cap	AP-22	10 10	20 20	.71	1.28	AP-24 AR-24	10	20 20	.44		
1With 1/8 in. angle fixture cap 1With 1/2 in. angle fixture cap		10	20	.71 .74	1.28 1.36	AS-24	10	20	.47		$\mathcal{L}$
With pendent cap	AT-22	iŏ	20	.60	.96	AT-24	iŏ	20	.33		•
With strain relief cap	AU-22	10	20	.60	.96	AU-24	10	20	.33		90000
With attachment plug	AV-22 AW-22	10 10	20 20	.80 .76	1.54	AV-24 AW-24	10 10	20 20	.53		137
With slotted base	A X-22	liŏ	20	.71	1 28	AX-24	liŏ	20	.44		
With small concealed base.	AY-22	10	20	.71	1.28	AY-24	10	20	.44		(1000b)
With large concealed base.	AZ-22†	10	20		1.42	AZ-241	10	20	.49		AVALUE
With angle concealed base. With base for % and ½ in.	BA-22	10	20	. 10	1.42	BA-24	10	20	.49	2.20	
condulets	BC-22	10	20	. 76	1.42	BC-24	10	20	. 49	2.20	<b>(27</b>
With base for 34 in. con-	D37 00						١.,		ا ا		
1With base for 1/2 and 3/4 in.	BX-22	10	20	. 76	1.42	BX-24	10	20	.49	2.20	THE PARTY OF THE P
taplets,	BW-22	10	20	.76	1.42	BW-24	10	20	.49	2.20	
With wood molding base	BB-22	10	20	.71	1.28	BB-24	10	20	.44	2.08	AW BUSE
With one way National Base		10	20		1.28	BD-24	10	20	.44		
With two way National base twith small covered base	BE-22 BH-22	10 10	20 20	.71	1.28 1.58	BE-24 BH-24	10 10	20 20	.44		(00000D
With large covered base	BK-22	liŏ	20		1.82	BK-24	iŏ	20	.63		BC BASK
With 31/4 in. box base	BL-22	5	20	.90	1.82	BL-24	5	20	. 63		(DEI)
1With 4 in. box base 1With 3¼ in. pancake base.	BM-22 BN-22	1 5	20 20	1.20	2.68 2.12	BM-24 BN-24	1 5	20 20	.93 .73		(Triology)
With 4 in. pancake base	BP-22	۱ĭ	20	1.30	2.98	BP-24	Ιĭ	20	1.03		01 84SE
With concealed rosette base	BR-22	10	10	1.02	2.16	BR-24	10	10	.75	2.94	FIZAN
With cleat rosette base	BS-22*	10	10	1.02	2.16	BS-24*	10	10	.75	2.94	
With 2 wire molding rosette base	BT-22	10	10	1.02	2.16	BT-24	10	10	.75	2.94	190000
With 3 wire molding rosette	<i></i>	٠.	٠.	02			ł	l			F = 3
hase	BU-22	10	10	1.02	2.16	BU-24	10	10	.75	2.94	
With combination resette	BV-22	10	10	1.02	2 10	BV-24	10	10	.75	2.94	
With cleat base covered	27 4 - 22	1 10	۱ ' '	1.02	2.10	D 1-24	۱" ا	۱ ' '	ا"، ا	2.54	C0000H
connections	BY-22	5	50		1.77	BY-24	5	50	. 62		Free 3
With canopy tap base	BZ-22	10	20	.75	1.44	BZ-24	10	20	.48	2.38	للمعيين

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass when specified will be furnished without extra charge. For special finishes,

Polished brass when specified will be furnished without extra charge. For special finishes, see listing elsewhere.

\*\*For long keys, metal keys, switches with threaded stems, and other special sockets, see listing elsewhere

††Bodies are regularly furnished with 8 inches of chain. For extra chain, cord, instead of chain, extension chain guides, etc., see listing elsewhere.

\*Approved rating 2 amperes, 125 volts.

†This base is suitable for attachment to No. 500 Adaptiboxes.

‡National Electrical Code Standard.



B H BASE

0000D

B-K BASE

SERENCE OF THE PERSON

#### "NEW WRINKLE" SOCKETS



No. 23 3 Amperes, 125 Volte 1 Ampere, 250 Volts



10 Amperes, 250 Volte

Schedule "H"

"Spartan" Plug Receptacle

























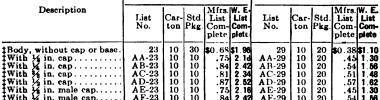












Turn Candle Switch and "Spartan" Plug Receptacle

Turn Candle Switch

	With 1/4 in. male cap	AF-23	10	10	.84			10	20	.54	1.58	į
•	With 3 in. male cap	AG-23	10	10	.84			10	20	.54	1.58	j
7	With 1/2 in. male cap		10	10	.90			10	20		1.74	
	‡With ⅓ in. fixture cap		10	10	.81	2.34		10	20		1.48	
	With ¼ in. fixture cap	A L-23	10	10	.84	2.42		10	20	. 54	1 56	į
	‡With ⅓ in. angle cap	A M-23	10	10	.80			10	20	.50		
P)	With in angle cap With in angle cap	A N-23	10	10	.89			10	20	.59		
1	With in angle cap With in angle fixture cap	AP-23	10	10	.86			10	20	.56		
•	‡With 1/4 in. angle fixture cap	AR-23	10	10	.86			10	20	. 56		
	‡With ⅓ in. angle fixture cap	AS-23	10	10	.89			10	20		1.70	
_	With pendent cap	AT-23	10	10	.75			10	20		1.30	
9	With strain relief cap	A U-23	10	10	.75			10	20		1.30	
1	With attachment plug	AV-23	10	10	.95			10	20		1.88	
	With cleat base		10	10	.91			10	20		1 78	
	With slotted base	AX-23	10	10	.86			10	20		1 62	
À	With small concealed base.	AY-23	10	10	.86			10	20		1.62	
1	With large concealed base.	AZ-23†	10	10	.91				20		1.76	
	With angle concealed base.	BA-23	10	10	.91	2.62	BA-29	10	20	.61	1.76	)
	twith base for 1/8 and 1/2 in.				1 .			į .				
	condulets	BC-23	10	10	.91			10	20		1.76	
<b>ት</b>	With base for ¾ in. condulet	BX-23	10	10	.91	2.62	BX-29	10	20	.61	1.76	)
4	1With base for 1/2 and 3/4 in.				1 . 1	1		1	1	i		
J	taplets	BW-23	10	10	.91	2.62		10	20		1.76	
	With wood molding base	BB-23	10	10	.86			10	20		1.62	
	With one way National base	BD-23	10	10	.86			10	20		1 62	
À	With two way National base	BE-23	10	10	.86			10	20		1.62	
7	With small covered base	BH-23	10	10	.96		BH-29	10	20		1.90	
フ	With large covered base	BK-23	10	10		3.04	BK-29	10	20		2.18	
	With 31/4 in. box base	BL-23	5	10	1.05	3.04	BL-29	5	20		2.18	
	With 4 in. box base	BM-23	1	10	1.35	3.90	BM-29	1	20	1.05		
h	tWith 3¼ in. pancake base	BN-23	5	10	1.15			5	20		2.48	
	With 4 in. pancake base	BP-23	1	10	1.45		BP-29	1	20	1.15		
ı	With concealed resette base		10	10	1.17			10	10	.87		
ノ	With cleat rosette base	BS-23*	10	10	1.17	3.38	BS-29*	10	10	.87	2.52	í
	With 2 wire molding resette	Dm 00				1	D/T 00	١.,		1	l	

Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass when specified will be furnished without extra charge. For special finishes, see listing elsewhere.

 $\begin{array}{c|c} 5 & 50 \\ 10 & 20 \end{array}$ 

10 | 1.17 3.38 BT-29 | 10 |

BV-29

BY-29 BZ-29

1.17 3.38

1.04 3.21 .90 2.88

10

 $\frac{50}{20}$ 

10 10

10 10

10

.87 2.52

.87 2.52

.87 2.52

.74 2.18 .60 1.85

\*Approved rating 2 amperes, 125 volts.

BT-23 10

10 10

> 10 10

BU-23

BV-23

BZ-23

With 3 wire molding resette

With combination resette

with cleat base covered



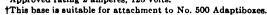


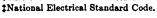
B-C BASE (da) (dolole)

B-X BASE

B-D BASE

B-E BASE





B-P BASE



## "WRINKLET" FIXTURE SOCKETS





No. 81 660 W., 250 V.



No. 80 250 W., 2503V.



No. 82 660 W., 250 V.



660 W., 250 V.



WE



No. 95 660 W., 250 V.



No. 85 250 W., 250 V.



No. 84 250 W., 250 V.



No. 96 6 Amp., 125 V. 3 Amp., 250 V.



No. 92 3 Amp., 125 V. 1 Amp., 250 V.



Bryant Sockets and Switches

S.P. Push Button Socket Schedule "B"

S.P. Key Socket Schedule "B"

Push Button Candle Sw.

Q.T. Key Socket Schedule "B"

Key Candle Sw.

















		١	List	List			List	List		١	List	List
D	List		Com-				Com-		List		Com-	
Description	No.	F KE.	plete	biere	No.	F Kg.	plete	prece	No.	FKK.	plete	Diere
XBody, without cap	81		\$0.26	\$0.64			<b>\$0.2</b> 6		82		\$0.29	\$0.70
8With ⅓ in. cap	WA-81	500							WA -82			
‡With ¼ in. cap	WB-81	250			W B -80				WB-82			
With 38 in. cap					WC -80			.94	WC -82			
With 18 in. male cap					WE -80				WE -82			
With 14 in. male cap					WF -80				WF-82			1.08
With 38 in. male cap	WG-81	250			WG-80				WG-82			
With 1/8 in. fixture cap					W K -80				W K -82			
With 1/2 in. fixture cap					W L -80				W.L82			
With 16 in. angle cap					W M-80				W M-82			
With 1/4 in. angle cap					WN -80				W N -82			
With 3 in. angle cap					WP -80				WP -82			
With 16 in. angle fixture cap.					WR -80				WR -82			
With 14 in. angle fixture cap.					WS -80				WS -82			
With pendent cap	IWT-81	500	.33	.80	WT -80	500	. 33	1 .80	WT -82	500	.36	.88

	Std. Keyless Socket Schedule "B"				Short I Sche	Ceyle dule	ss Soc	ket	Pull Socket Schedule "B"			
‡Body, without cap	83		80.23				\$0.23	\$0.56			0.53	11.28
With 1/8 in. cap	WA -83	500			WA -95		.30		WA -85	250	. 60	1.44
With 1/2 in. cap	WB-83	250	.39	.94	WB- 95	250	, 39	.94	IWB -851	100	. 69	1.66
With 3 in. cap	WC -83	250	.36	. 88	WC -95	250	. 36	. 88	WC -85	100l	. 66	1.60
With 1/8 in. male cap		500	.30	.72	WE -95	500	. 30	.72	WE -85	250	. 60	1 44
With 1/4 in. male cap		250	. 39	.94	WF -95	250	. 39	.94	WF -85	100		1.66
With % in. male cap		250	.39		WG -95		. 39		WG -85	100		1 86
With 16 in. fixture cap		250	.36		WK-95		. 36		WK-85	100		1 60
With 14 in. fixture cap	W L -83	250	.39		W L -95		. 39			100	. 69	1 86
With 1/2 in. angle cap	W M-83	100	.35		W M-95		. 35		W M-85	50		1.58
With 14 in. angle cap	W N -83	100	.44		W N -95		.44		W N -85	50		
With 3 in. angle cap	WP -83	100	.41		WP -95		.41		WP -85	50		1.72
With 1/2 in. angle fixture		100	.41		WR -95		.4i		WR -85	50		1.72
With 12 in. angle fixture cap.		100			WS -95		.44			50		
With pendent cap		500		.72	WT -95		. 30		WT -85	250	. 60	1.44

	Schedule "B" Schedul				Sched	lule "H"
Body, without cap	84 10	0 \$0.53 \$1.28		50 \$0.26 \$0.76		50 \$0.26 \$0.76
With 1/8 in. cap	WA -84 10				WA -92	50 .33 .96
With 1/4 in. cap		0 .69 1.66	WB -96 2	20 .42 1.22	WB -92	20 .42 1.22
With 3g in. cap	WC-84 5	0 .66 1.60	WC -96		WC -92	20 . 39 1.14
With 1/8 in. male cap	WE-84 5	0 .60 1.44[]		20 .33 .96	WE -92	20 .33 .96
With 1/4 in. male cap	WF-84 5	0 .69 1.66	WF-96 2	20 .42 1.22	WF -92	20 .42 1.22
With % in. male cap	WG-84 5	.69 1 68 .66 1 60 .60 .60 1 44 .60 .69 1 66 .60 .69 1 66 .60 .66 1 60 .60 .69 1 68	WG-96 2		WG -92	20 .42 1.22
With 1/2 in. fixture cap	WK-84 5	ol .66  1. <b>60</b>	WK-96		WK-92	20 .39 1.14
With 1/4 in. fixture cap	WL-84 5	0 69 1 66	WL -96		WL -92	20 .42 1.22
With in angle cap	WM-84 5		W M-96		W M-92	20 .38 1.10
With 14 in. angle cap	WN-84 5	0 .74 1.78	WN-96	20 .47 1.36	WN-92	20 .47 1.36 20 .44 1.28
With 3 in. angle cap	WP-84 5	0 .71 1.72	WP -96	20 .44 1.28	WP -92	20 .44 1.28
With 1/8 in. angle fixture cap.			WR -96	20 .44 1.28	WR -92	20 .44 1.28
With 1/4 in. angle fixture cap.		0 .74 1.78	WS -96	20 . 47 1.36	WS -92	20 .47 1.36
With pendent cap					WT -92	50 .33 .96

Turn Socket

Note: Carton quantity of 25, except the Nos. 98, 92, 93 and 90 groups which are 10.

Standard finish is brush or old brass, which will be shipped when no finish is specified. Pol when specified will be furnished without extra charge. For special finishes, see listing elsewhere.

National Electrical Code Standard. Polished brass









3 Amp., 125 V. 1 Amp., 250 V.

















## Bryant Sockets and Switches

"WRINKLET" FIXTURE SWITCHES

Sc	hedule	"H"
Pull	Candle	Switch

Schedule "H" Turn Candle Switch

Schedule "H" S.P. Pull Switch

Schedule "H"

Description	List No.	Std.	Mfrs. List Com- plete	List	List No.	Std.	Mfrs. List Com- plete	List Com-	List	Std.	Mfrs. List Com- plete	List Com-
Body, without cap.  With 1/4 in. cap.  With 3/4 in. cap.  With 3/4 in. cap.  With 3/4 in. male cap.  With 3/4 in. male cap.  With 3/4 in. male cap.  With 1/4 in. fixture cap.  With 1/4 in. fixture cap.  With 1/4 in. angle fixture cap.	WA -94 WB -94 WE -94 WF -94 WK -94 WL -94 WM -94 WN -94 WR -94 WS -94	50 50 20 20 20 20 20 20 20 20 20 20 20 20 50	.69 .69 .69 .69 .69 .65 .74	1 44 1 65 1 58 1 44 1 65 1 65 1 58 1 77 1 70 1 70	93 WA -93 WC -93 WE -93 WF -93 WK -93 WK -93 WM -93 WN -93 WN -93 WR -93 WR -93	30 10 10 10 10 10 10 10 10 10 10 10 10	.84 .81 .75 .84 .81 .84 .80 .89 .86 .86	1.80 2.01 1.95 1.80 2.01 2.01 1.95 2.01 1.92 2.13 2.06 2.08 2.13	90 WA -90 WB -90 WC -90 WF -90 WF -90 WK -90 WM -90 WN -90 WR -90 WS -90 WT -90	50 50 20 20 20 20 20 20 20 20 20 20 20 20 50	.69 .69 .69 .69 .65 .74 .71	1 44 1 68 1 58 1 44 1 68 1 58 1 68 1 56 1 77 1 70

Note: Carton quantity of 25, except the Nos. 96, 92, 93 and 90 groups which are 10.











1

## Single Pole Pull Fixture Switches 3 AMPERES, 125 VOLTS-1 AMPERE, 250 VOLTS

List No.	Descrip:io <b>n</b>	Carton	Std. Pkg.	Mfrs. List Complete	
91	‡Body, without cap	10	50	\$0.68	\$1.63
WA -91	With 1/8 inch cap	10	50	.75	1.80
WB -91	With 1/4 inch cap	10	20	.84	2.01
WC -91	With 36 inch cap	10	20	.81	1.94
WE -91	With 1/8 inch male cap	l 10 l	20	.75	1.80
WF -91	With 14 inch male cap	l io l	20	.84	2.01
WG -91	With 3/8 inch male cap	10	20	.84	2.01
WK-91	With ½ inch fixture cap	10	20	.81	1.94
W L -91	With 14 inch fixture cap	10	20	.84	2.01
W M-91	With 1/8 inch angle cap	liól	20	.80	1.92
WN-91	With 1/4 inch angle cap	10	20	.89	2.13
WP -91	With % inch angle cap	10	20	.86	2.08
WR-91	With 1/8 inch angle fixture cap	10	20	.86	2.08
WS -91	With 1/4 inch angle fixture cap	l io l	20	.89	2.13
WT -91	With pendent cap	l io l	50	75	1 80



#### "WRINKLET" FIXTURE CAPS

	***************************************				
List No.	Description	Carton	Std. Pkg.	Mfrs. List Each	W. E. List Each
WA	1/2 inch cap	25	500	\$0.07	\$0.20
WB	1 inch cap	25	100	.16	.46
WC	inch cap	25	250	.13	.38
WE	1 inch male cap	25	50	.07	.20
WF	1/2 inch male cap	l 25 i	50	1 .16	.48
WG	inch male cap	25	50	.16	.48
WK	3 inch fixture cap	25	50	1 .13	.38
WL	14 inch fixture cap	25	50	16	.46
WM	% inch angle cap	25	100	1 12	.36
WN	1/4 inch angle cap	25	50	.21	.62
WP	inch angle cap	25	50	.18	.52
WR	1/2 inch angle fixture cap	25	50	1 .18	.52
WS	inch angle fixture cap	25	50	.21	.62
WT	Pendent can	25	500	07	20



Standard finish is brush or old brass, which will be shipped when no finish is specified. Polished brass when specified will be furnished without extra charge. For special finishes, see listing elsewhere.

Bodies are regularly furnished with short chain and 10 feet of best quality linen cord. Extra cord, 2 cents list per foot. For insulated chain, etc., see listing elsewhere.

National Electrical Code Standard.

























Wiring Devices

## BRYANT INTERCHANGEABLE PORCELAIN LINE



No 70 S.P. Key Socket 250 Watts, 250 Volts



No. 73 Keyless Socket 660 Watts, 250 Volts



No. 79 Receptacle 10 Amp, 250 Volts



No. 75 **Pull Socket** 250 Watts 250 Volts

#### Schedule "B"

	s.	S.P. Key Socket Keyless Socket								
Description	List No.			Mfrs. List Com- plete	List Com-			Std.	Mfrs. List Com- plete	List Com-
Body, without cap or base With pendent cap. With ½ in cap. With ½ in cap. With ½ in cap (aluminum) *With ½ in cap (aluminum) *With ½ in angle cap (aluminum) With cleat base †With large concealed base With wood molding base. With 3½ in box base.  With 4 in box base.	PT-70 PA-70 PB-70 PC-70 PD-70 PP-70 RW-70 PW-70	10 10 10 10 10 10 10 10 10 10	250 250 100 100 100 100 100 100 100 100 100	\$0.25 .30 .35 .35 .50 .40 .55 .35 .35 .35	72 84 84 1 20 96 1 32 84 84 1 08	PT-73 PA-73 PB-73 PC-73 PD-73 PP-73 RW-73 PW-73 PZ-73 RB-73 RL-73	10 10 10 10 10 10 10 10 10	250 250 100 100 100 100 100 100 100 100 100	\$0.20 .25 .30 .30 .45 .35 .30 .30 .40 .45	60 72 72 72 1 08 84 1 20 72 72 72 96

#### Schedule "H"

#### Schedule "B"

	Spa	rtan	Rec	eptac	le	Pull Socket						
Description	List No.			Mfrs. List Com- plete	List	List No.			Mfrs. List Com- plete	List Com-		
		_	-	_	-	-	-			-		
‡Body, without cap or base	79	10	50	\$0.20	\$0.48	75	10	100	\$0.75	\$1 80		
With pendent cap	PT-79		50	.25		PT-75		100		1 92		
With 1/8 in. cap	PA-79	10	50	.30	.72	PA-75	10	50	.85	2.04		
With 1/4 in. cap	PB-79	10	50	.30	.72	PB-75	10	50	.85	2.04		
‡*With 3/8 in. cap	PC-79		50	.30	.72	PC-75		50	.85	2.04		
‡With ½ in. cap (aluminum)	PD-79	10	20	.45	1.08	PD-75	10	50	1.00	2.40		
‡*With 3/8 in. angle cap	PP-79	10	20	.35	.84	PP-75	10	50	.90	2.16		
‡With 1/2 in. angle cap		13.0					15.00	1	1000			
(aluminum)	RW-79		20	.50		RW-75		50	1.05			
‡With cleat base	PW-79		20	.30		PW-75		50	.85			
‡†With large concealed base	PZ-79		20	.30		PZ-75		50	.85			
With wood molding base	RB-79		20	.30		RB-75		50	.85			
With 31/4 in. box base	RL-79		20	.40		RL-75		50	.95			
‡With 4 in. box base	RM-79	1	20	.45	1.08	RM-75	1	50	1.00	2.40		

Standard finish of brass caps is brush or old brass, which will be shipped when no finish is specified. Polished brass when specified will be furnished without extra charge. Special finishes will be supplied at one-half the list prices given elsewhere.

\*This cap can be furnished in aluminum at 30 cents list extra.

†This base is suitable for attachment to No. 500 Adaptiboxee

‡National Electrical Code Standard.

#### MOGUL PORCELAIN SOCKETS













C-L-J.-I- ((D))

No. 4073

Keyless Mogul Porcelain Sockets

	No. 4069 1500 Watts, 600 Volts—With	1500 Watts, 600 Volts—With Aluminum Caps								
List No.		Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each				
4077	Without cap or yoke	1	50		\$0.70	\$1.68				
4069	With 3/8 inch cap	1	50		1.00	2.40				
4070	With ½ inch cap		50		1.00	2.40				
4071	With 34 inch cap	1	50	١	1.00	2.40				
12.1	WITH CAST IRON Y	OKES			Schedu	e "B"				
-					40.05					

	WITH CAST INON TOKES		Schedu	ie b
4078	With 3% inch yoke	50	 \$0.85	\$2.04
4079	With ½ inch yoke 1	50	 .85	2.04
4080	With 34 inch yoke	50	 .85	2.04
H	loles for supporting screws of No. 4077 are spaced 1½ inches on cer	iters.		

20 \$1.32 For fixtures work .....

Holes for supporting screws are spaced  $1\frac{5}{32}$  inches on centers.

Schedule "B" KEYLESS MOGUL RECEPTACLES-1500 Watts, 250 Volts \$0.75 4073 | Cleat Receptacle .....

Holes for supporting screws are spaced 21/8 inches on centers.











No. 4085

Wiring Devices

Weatherproof Keyless Mogul Porcelain Sockets WITHOUT CAP OR YOKE Schedule "B" With 15 inch wires... \$0.70 50 \$1.68 No wires..... .55 1.32 Holes for supporting screws are spaced 1\frac{1}{32} inches on centers. Cahadula "R"

	WITH ALUMINUM CAPS		Schedu	ile "B"			
*4082	With 15 inch wires, 3/8 inch cap	1   50   .	.   \$1.00	\$2.40			
*4083	With 15 inch wires, ½ inch cap	1 50 .	. 1.00	2.40			
*4084	With 15 inch wires, 34 inch cap	1 50 .	. 1.00	2.40			
†4089		1 50 .	85	2.04			
†4090	No wires, ½ inch cap	1 50 .	. 85	2.04			
†4091	No wires, 3/4 inch cap	1 50 .	. 85	2.04 le "B"			
tassfro	WITH CAST IRON YOKES						
*4085	With 15 inch wires, 3/8 inch cap	1   50   .	.   \$0.85	\$2.04			
*4086	With 15 inch wires, ½ inch cap	1 50 .	85	2.04			
*4087	With 15 inch wires, 3/4 inch cap	1 50 .	85	2.04			
†4092	No wires, 3/8 inch cap	1 50 .	70	1.68			
†4093	No wires, ½ inch cap	1 50 .	70	1.68			
*4094	No wires, 3/4 inch cap	1 50 .	70	1.68			

\*Longer wires furnished at 9 cents list per foot per conductor. Preferable where wires of various lengths are wanted at short notice. Equipped with loop terminal, into which wires provided by customer may be hooked and soldered. Digitized by

## BRYANT AND PERKINS SOCKETS



No. 46750



No. 4061







Twin Sockets

Keyless Sockets, 660 Watts, 250 Volts

Pull Sockets, 250 Watts, 250 Volts

Schedule "B"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs, List Each	W. E. List Each
46750▲	Keyless—1/8 inch cap	25	50	10	\$0.65	\$1.56
46751	Keyless—3/8 inch cap	25	50	10	.70	1.68
4061▲	Keyless—with Edison plug	10	50	30	1.00	2.40
4051	Pull—1/8 inch cap	10	50	20	1.00	2.40
4052	Pull—3/8 inch cap	10	50	20	1.06	2.56
4005▲	Pull—1/8 inch cap	10	50	20	1.00	2.40
4006▲	Pull—3/8 inch cap	10	50	20	1.06	2.56
4053▲	Pull—1/8 inch cap	10	50	20	1.00	2.40
4054	Pull—3/8 inch cap	10	50	20	1.06	2.56
4029	Pull—with Edison plug.	5	50	30	1.35	3.24
4039▲	Pull—with Edison plug	5	50	30	1.35	3.24
4040	Pull—with Edison plug	5	50	30	1.35	3.24

#### Aluminum Shell Sockets

660 WATTS, 250 VOLTS

Schedule "B"



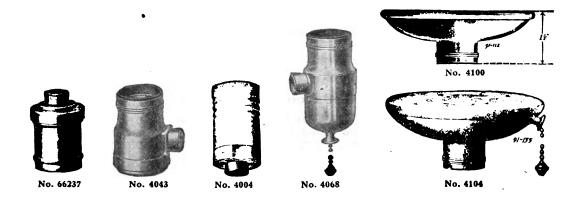
No. 4106

These sockets having aluminum shells are suitable for outdoor work. The shells are lined with porcelain and the sockets are therefore suitable for show window work and conform to the specifications of the National Board of Fire Underwriters as to the conditions under which insulating joints may be omitted.

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
4106 <sup>▲</sup> 4107 <sup>▲</sup>	Keyless, ¾ inch cap Keyless. ¼ inch cap	10 10	50 50	23 22	\$0.50 .50	\$1.20 1.20
ctrical Co	Digitized b	y G(	og	e		

Wiring Devices

## **BRYANT AND PERKINS SOCKETS**



## **Bryant Electrolier Sockets**

660 Watts, 250 Volts

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each				
	BRYANT ELECTROLIER SOCKET Schedule "B"									
66237 <b>^</b> 50766	Keyless—½ inch cap   Keyless—³ s inch cap	50 10	250 100	45 20	\$0.40 .46	\$0.96 1.12				
BRYANT ANGLE SOCKETS Schedule "B"										
4043▲ 4044▲	Keyless—1/8 inch cap   Keyless—3/8 inch cap	25 25	100 100	25 28	\$0.35 .41	\$0.84 1.00				
SOCKET FOR CANDLE FIXTURES Schedule "B"										
4004	Keyless—1/8 inch nipple	25	250	15	\$0.30	\$0.72				
SOCKET FOR INDIRECT LIGHTING FIXTURES Schedule "B"										
	SOCKET FOR INDIRECT LIGHTING	FIX <b>TU</b> R	ES	s	chedul	e "B"				
4068 4116	Pull, with bottom chain guide, and ½ inch nozzle Pull, with bottom chain guide, and ½ inch 3 step nozzle	FIXTUR 10 10	50 50	22 22	\$0.75					
	Pull, with bottom chain guide, and ½ inch nozzle	10 10	50 50	22 22	\$0.75	\$1.80 1.92				
	Pull, with bottom chain guide, and $\frac{1}{8}$ inch nozzle Pull. with bottom chain guide, and $\frac{1}{8}$ inch 3 step nozzle	10 10	50 50	22 22	\$0.75 .80 chedule	\$1.80 1.92				
4102 4103 Outsi	Pull, with bottom chain guide, and ½ inch nozzle Pull, with bottom chain guide, and ½ inch 3 step nozzle  WALL SOCKETS FOR 3¼ INCH OUTLE  Keyless Wall Socket.	10 10 ET BOX	50 50 ES	22 22 S	\$0.75 .80 chedule	\$1.80 1.92 • "B" \$1.08				
4102 4103 Outsi	Pull, with bottom chain guide, and ½ inch nozzle Pull, with bottom chain guide, and ½ inch 3 step nozzle  WALL SOCKETS FOR 3¼ INCH OUTLE  Keyless Wall Socket	10 10 ET BOX	50 50 ES	22 22 S	\$0.75 .80 chedule	\$1.80 1.92 e "B" \$1.08 1.20				

Outside diameter of base is  $4\frac{5}{8}$  inches.

Holes for supporting screws are spaced  $2\frac{3}{4}$  and  $3\frac{1}{2}$  inches on centers.

Standard finishes are brush brass, old brass, polished brass.

For other finishes see listing on socket finishes.

Anational Electrical Code Standard.



#### **BRYANT SOCKETS**





No. 25707

100

#### Street Hood Sockets

250 Watts, 250 Volts

The malleable iron yoke is threaded for 3% inch iron pipe.

Schedule "B"

\$0.44 \$1.05

	660 Watts, 600 Volts			. Sc	hedul	• "B"
25706▲	With side lugs	10	100	75	\$0.27	\$0.65
List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each

No. 25707 is fitted with 6 inches of No. 14 B. & S. Stranded Rubber-covered Wire. Longer wire on special order. Extra charge, 18 cents per foot (9 cents each conductor).



25707



With wire leads.....



No. 4095

No. 4097

## Sockets for Mogul Base Lamps

660 Watts, 600 Volts

Schedule "B"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs.   List Each	W. E. List Each
4021 <sup>4</sup> 4022 <sup>4</sup>	Keyless—¾ inch cap. Keyless—½ inch cap.	10 10	50 50	35 35	\$1.00 1.00	
	With 3¼ inch Shade Holder Attac	hed		So	hedule	"B"
4027 <sup>4</sup> 4028 <sup>4</sup>	Keyless—¾ inch cap Keyless—½ inch cap	1 1	50 50	50 55	\$1.30 1.30	\$3.12 3.12
	MOGUL WALL SOCKETS Porcelain Base for 31/4 and 4 Inch Outl					

Keyless, with 31/4 inch shade holder.....

#### **BRASS COVERED BASE**

4097	Keyless	 50	 \$1.25  \$3.00
4098	Keyless, with 31/4 inch shade holder	 50.	 1.55 3.72

Holes for supporting screws are spaced  $2\frac{3}{4}$  and  $3\frac{1}{2}$  inches on centers. Standard finish is brush brass.

Holes for supporting screws are spaced 23/4 and 31/2 inches on centers.

For other finishes see listing on socket finishes.

National Electrical Code Standard.

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50

4096

## BRYANT PORCELAIN RECEPTACLES

660 Watts, 250 Volts







No. 59275





No. 9394

## With Exposed Terminals

Schedule "B"

List No.	Description	on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
50715	Pony Cleat	1 1 ins.	10	250	79	\$0.15	\$0.36
59275	Cleat, base 1 inch high	2 ins.	10	250	106	.18	.44
9171	Cleat Receptacle	1	10	500	135	.10	.24
50757	Cleat, with copper fittings and screws	l	16	250	70	.20	.48
9394	Cleat, removable ring	1	10	250	70	.20	.48

Nos. 9171, 50757, and 9394 supported by one screw in the center.





No. 4013



No. 9403

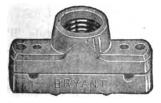


No. 28795

## With Exposed Terminals

Schedule "B"

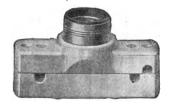
List No.	Description	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
9402	Cleat Receptacle	23/8 ins.	10	250	100	\$0.15	\$0.36
4013	Cleat, for W. P. Shade Holder	23/8 ins.	10	250	110	.20	.48
9403	Cleat, with brass ring for strd. shade holder	23/8 ins.	10	250	100	.25	.60
<b>287</b> 95 <b>^</b>	Cleat Receptacle	1 1/8 ins.	10	250	95	.15	.36



No. 58301



No. 58300



No. 58949

## With Enclosed Terminals

Schedule "B"

List No.	Description	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
58301 <sup>4</sup> 58300 <sup>4</sup> 58949 <sup>4</sup>	Cleat	$1\frac{1}{16}$ ins. $1\frac{1}{16}$ ins. $1\frac{1}{16}$ ins.	5 5 5	250 250 250	165 165 160	\$0.25 .30 .35	.72

## **BRYANT PORCELAIN RECEPTACLES**

660 Watts, 250 Volts







No. 4001



No. 4002



No. 59744 and 9447



No. 9401

## Concealed Base Receptacles

Schedule "B"

List No.	Description .	Diam. of Base	Screws Spaced on Centers	Carton Quan- tity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
4000 <sup>4</sup> 4001 <sup>4</sup> 4002 <sup>4</sup>	Concealed	$2\frac{16}{16}$ ins.	·15% ins. 15% ins.	10 10	250 250	95 95	\$0.25 .30	\$0.60 .72
50744 <sup>4</sup> 9447 <sup>4</sup>	Concealed, with brass ring for standard shade holder. Concealed, with removable ring. Concealed, with removable ring and D.	$2\frac{5}{16}$ ins. $2\frac{3}{8}$ ins.	15% ins. 114 ins.	10 10	250 100	90 45	.35 .30	. <b>84</b> . <b>72</b>
9401	P. Fuse	2½ ins. 2¾ ins.	15% ins. 1 <del>12</del> ins.	10 10	100 100	60 55	.45 .40	1.08 .96



No. 4024



No. 4026



No. 4025



No. 42453



No. 58950

## Molding Base Receptacles

Schedule "B"

List No.	Description	Diam. of Base	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
4024 <sup>4</sup> 4026 <sup>4</sup> 4025 <sup>4</sup>	Molding Molding, for W. P. Shade Holder Molding, with brass ring for stan-		$2\frac{9}{32}$ ins. $2\frac{9}{32}$ ins.	10 10	250 250	85 90	\$0.25 .30	\$0.60 .72
	dard shade holder	••••	$2\frac{9}{32}$ ins.	10	<b>2</b> 50	85	.35	.84
42453 <sup>4</sup> 58302 <sup>4</sup>	Molding		1 13 ins. 1 13 ins.	10 10	250 250	128 130	. 25	. <b>60</b> . <b>72</b>
58950▲	Molding, with brass ring for stan- dard shade holder		1 <del>1 2</del> ins.	10	250	123	.35	.84

## **BRYANT RECEPTACLES**

## Conduit Box and Sign Receptacles













No. 61988

No. 59108

No. 4072

No. 61777

No. 40488

# FOR CONDUIT BOXES AND METAL SIGNS 660 Watts, 250 Volts

Schedule "B"

List No.	Description	Car- ton Quan- tity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
61988*	With screw ring, 1 inch back.  The hole required for this receptacle is 1½ inches in diameter.	10	250	75	\$0.20	\$0.48
59108	With screw ring, $\frac{1}{2}$ inch back.  The hole required for this receptacle is $1\frac{7}{16}$ inches in diameter.	10	250	80	.20	.48
4109	Same as 59108, less wire, 1 inch back	10	250	82	.25	.60
4072	Sign Receptacle, 1 inch back.  The hole required for this receptacle is 1% inches in diameter.	10	250		.20	.48
61777	Sign Receptacle.  The hole required for this receptacle is 1% inches in diameter.	10	250	83	.17	.42
40488	Holes for supporting screws are spaced $1\frac{13}{16}$ inches on centers.  Pony Sign Receptacle.  The hole required for this receptacle is $1\frac{3}{8}$ inches in diameter.  Holes for supporting screws are spaced $1\frac{13}{16}$ inches on centers.	10	250	60	.17	.42

See listing on "brass conduit box covers" for receptacles Nos. 61988 and 59108.











No. 4099

# FOR CONDUIT BOXES AND METAL SIGNS 660 Watts, 250 Volts

Schedule "B"

List No.	Description	Car- ton Quan- tity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
4035▲	With stranded wires, 1 inch back	10	250	95	\$0.28	\$0.68
*4036*	Without wires, 1 inch back	10	250	80	.20	.48
4003▲	Weatherproof, with ring, ½ inch back.  The hole required for the above receptacles is 1½ inches in diameter.	10	250	100	.28	. 68
4057	With stranded wires.  The hole required for this receptacle is 15% inches in diameter.	10	250	75	.25	. 60
†59107▲	Conduit Box Receptacles. The hole required for this receptacle is 1 <sup>11</sup> / <sub>16</sub> inches in diameter.	10	250	100	.22	.54
*4074	Without wires.  The hole required for this receptacle is $1\frac{11}{16}$ inches in diameter.	10	250		.17	.42
4099	Removable porc. ring sign receptacle with closed back		250		.25	. 60

All of the above receptacles except 4036 are fitted with 6 inches of No. 14 B. & S. Stranded Rubber-covered Wire. Longer wires on special order. Extra charge, 18 cents per foot (9 cents each conductor). \*These receptacles are the same as No. 4035 and 59107 receptacles except that the wires are omitted.

Terminal plates to which conductors may readily be soldered are provided.

See listing on "brass conduit box covers" for the above.

†This receptacle is approved for 660 watts, 600 volts.

\*National Electrical Code Standard.

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## **BRYANT RECEPTACLES**

660 Watts, 250 Volts



No. 4014



No. 4023



No. 4063



No. 1700

## Sign Receptacles

Schedule "B"

List No.	Description	Diam. of Hole Required	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
*4014*	"Ruby" Sign, with binding screws	15/8 ins.		10	250	65	\$0.20	\$0.48
<b>*4023*</b>	Universal Sign Receptacle	$1\frac{1}{2}$ ins.		10	250	· 85	.20	. 48
*4063*	Sign Receptacle	$1\frac{3}{8}$ ins.	1 1 ins.	10	250	75	.14	.34
†1700 <b>^</b>	Pony Sign Receptacle	1 % ins.	$1\frac{7}{8}$ ins.	10	250	145	.14	. 34
† <b>5</b> 0899	Sign Receptacle, short skirt	$1\frac{9}{16}$ ins.	1 1/8 ins.	10	100	30	.25	. 60
†50782	Sign Receptacle, long skirt	$1\frac{9}{16}$ ins.	$1\frac{7}{8}$ ins.	10	100	50	.25	. 60

See listing on "brass conduit box covers" for receptacles Nos. 4014 and 4023.

\*For metal signs.

tFor wooden signs.



No. 62357



No. 9514



No. 62355



No. 4113



No. 411

## Receptacles for Conduit Boxes

Schedule "B"

List No.	Description	Screws Spaced on Centers	Car- ton Qnty.	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
62357	For use with 3¼ inch boxes	$2\frac{3}{4}$ ins.	5	100	200	\$0.35	\$0.84
4064	For use with 4 inch round box	3½ ins.	5	100	120	.45	1.08
9514	Flush Receptacle (two piece)	1 1/8 ins.	10	250	100	.30	.72
4033▲	Flush Receptacles (one piece)	1 1 % ins.	10	250	100	.20	.48
*4110	For use with $3\frac{1}{4}$ inch boxes, with black japanned cover		1	100	70	.30	.72
*4111	For use with $3\frac{1}{4}$ inch boxes, with sherardized cover	$2\frac{3}{4}$ ins.	1	100	70	.31	.76
*4112	For use with $3\frac{1}{4}$ inch boxes, with brush brass cover	$2\frac{3}{4}$ ins.	1	100	70	.40	. 96
†4113	For use with 4 inch boxes, with black japanned cover	$3\frac{1}{2}$ ins.	1	100	96	32	.78
†4114	For use with 4 inch boxes, with sherardized cover	$3\frac{1}{2}$ ins.	1	100	96	.335	. 82
†4115	For use with 4 inch boxes, with brush brass cover	$3\frac{1}{2}$ ins.	1	100	96	.44	1.06

<sup>\*</sup>Outside diameter  $3\frac{1}{4}$  inches. †Outside diameter  $4\frac{1}{16}$  inches.

## Receptacles for Condulets and Adaptiboxes Schedule "B"

200554	(C. 11+D )			1 050	100	1 00 051	
	Condulct Receptacle		10	250	103	\$0.25	\$0.60
62356*	Condulet Receptacle, for W. P. shade holder	1	10	250	110	.30	. 72
4076	Adaptibox Receptacle for shade holder	$2\frac{5}{16}$ ins.	10	250		.30	.72

## BRYANT MISCELLANEOUS RECEPTACLES

660 Watts, 250 Volts







No. 40507



No. 4038

## Receptacles for Conduit Boxes

Schedule "B"

List No.	Description	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
9397 <b>^</b>	Conduit Box Receptacle	1½ ins.	10	250	40	\$0.20	\$0.48
<b>405</b> 07 <b>^</b>		1¼ ins.	10	250	40	.17	.42

## Receptacles for Temporary and Decorative Lighting

Schedule "B"

4038▲	Temporary Decorative Cleat Receptacle	1 <del>1 5</del> ins.	10	250	103   \$0.18   \$0.44

No. 4038 Receptacle is provided with pointed binding screws designed to pierce the insulation, making it unnecessary to strip the wires. Stranded wire is preferable for this use.



No. 4037



No. 4056

## Receptacles for Temporary and Decorative Lighting

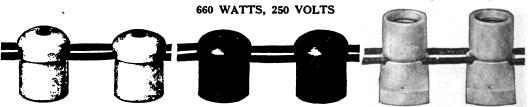
Schedule "B"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
4037 <b>^</b> 4056 <b>^</b>	Porcelain Temporary Decorative Receptacle	10 10	250 250	82 100	\$0.24 .30	

Nos. 4037 and 4056 Receptacles are provided with pointed binding screws designed to pierce the insulation, making it unnecessary to strip the wires. Stranded wire is preferable for this use.

<sup>&</sup>lt;sup>≜</sup>National Electrical Code Standard.

## BRYANT RECEPTACLES FOR DECORATIVE LIGHTING



Porcelain Decorative Receptacle

Mica Decorative Receptacle

Decorative Cleat Receptacle

#### Ready-wired Receptacles

These receptacles will be furnished "ready-wired," that is, supplied with approved stranded single braid rubber covered wire, connections soldered, and then filled with insulating compound, making the receptacles absolutely weatherproof.

We carry at all times a large stock of parts and can usually ship orders of reasonable size the same day that they are received at the factory.

These receptacles are put up in lengths of about 500 feet and will be so shipped, unless otherwise specified.

Additional lengths of wire can be supplied on either end of the streamers. Add \$0.13 list per foot. Mfrs List \$0.045 for No. 14 wire and \$0.15 list per foot. Mfrs List \$0.10 each (\$0.08 each conductor.) Mfrs.

each conductor.) Mirs List \$0.045 for No. 14 wire and \$0.15 list per toot. Mirs List \$0.10 can No. 12 wire.

List \$0.05 each for No. 12 wire.

The list price of receptacles spaced more than 30 inches apart is obtained by adding \$1.08 per 100 receptacles per inch. (Mfrs List \$0.75) to the list of No. 4041Z and 4042Z for No. 14 wire and \$1.23 per 100 receptacles per inch (Mfrs List \$0.85.) to the list of No. 124034Z, 124041Z and 124042Z for No. 12 wire.

Schedule "B"

	List Prices and Data	1			Sche	dule "B"
List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
4034 4041 4042	Porcelain decorative receptacle	10	250 250 250	60 75 100	\$0.20 .25 .285	\$0.58 .72 .82

#### WIRED WITH NO. 14 WIRE Porcelain Decorative Receptacle Mica Decorative Receptacle Decorative Cleat Receptacle W. E. List Mfrs. List per 100 Receptacles Mirs. List per 100 List Price per 100 W. E. List W. E. List Centers List No per 100 Receptacles List No. per 100 Receptacles List No. per 100 Receptacies Receptacles Receptacles \$74.40 76.20 78.00 80.40 81.60 83.40 85.20 14034A 14034B 14034C 14034C 14034F 14034F 14034F 14034J 14034N 14034N 14034A 14034S 14034C 14 \$62.40 66.00 67.80 69.60 71.40 73.20 76.80 80.40 82.20 84.00 85.00 91.08 #4041A #4041B #4041D #4041D #4041E #4041E #4041B #4041H #4041J #4041M #4041N #4041Q #4041C #4041C #4041U #4041U #4041W 14042A 14042B 14042C 14042E 14042F 14042F 14042J 14042J 14042J 14042N 14042N 14042P 14042P 14042R 4 ins. 5 ins. \$26.00 \$31.00 \$82.30 84.60 86.40 90.00 91.80 93.60 97.20 102.60 104.40 106.20 111.60 113.48 115.20 118.60 120.60 122.4t 124.20 126.00 \$34.50 31.75 32.50 33.25 34.00 34.75 35.50 36.25 34.50 35.20 36.00 36.75 37.50 38.25 26.75 27.50 28.25 6 ins. 7 ins. 29.25 29.75 30.50 31.25 8 ins. 9 ins. 39.00 39.75 40.50 10 ins. 11 ins. 31.25 32.00 33.50 34.25 35.00 35.75 36.50 38.00 87.00 88.80 92.40 94.20 96.00 97.80 99.60 103.32 12 ins. 37.00 38.40 39.24 40.00 40.75 41.50 43.75 44.50 46.75 46.75 48.24 49.00 40.50 42.75 43.50 44.25 45.00 46.50 47.25 48.00 49.50 14 ins. 15 ins. 16 ins. 17 ins. 18 ins. 20 ins. 21 ins. 23 ins. 14042R 140428 14042T 14042U 14042V 14042W 14042X 14042Y 14042Z 38.00 38.75 39.50 41.00 41.75 42.50 43.25 91 08 93 00 94 80 98 40 100 20 102 00 103.32 105.60 106.80 111.00 112.20 114.00 115.80 117.60 24 ins. 25 ins. 26 ins. 50 25 51.00 51.75 27 103 80 105 60 4041X 4041Y 75 50 ins. 28 ins. 44 00 52 5ŏ 50 30 ins. 45.50

#### WIRED WITH NO. 12 WIRE Decorative Cleat Receptacles Porcelain Decorative Receptacles Mica Decorative Receptacles Mfrs. List per 100 Receptacles Mfrs. List per 100 Receptacles Mfrs. List per 100 Receptacles W. E. List per 100 W. E. List W. E. List Center List No. List No. List No. per 100 Receptacles Receptacles Receptacles \$80.64 81.68 85.20 86.64 87.60 82.60 1124034A 1124034B 1124034C 1124041 A 1124041B 1124041C 1124041F 1124041F 1124041H 1124041 M 1124041 M 1124041 M 1124041 B 1124041 B 1124041 B 1124041 B 1124041 B 1124041 B 1124041 U 1124041 U 1124041 W 1124041 W 1124041 W 1124041 W 1124041 W 1124041 W 1124041 W 1124041 W 1124041 W 1124041 W 1124041 W 1124041 W 1124041 W 1124041 W 1124042A 1124042B 1124042C 4 ins. 5 ins. \$68.64 70.68 73.20 74.66 75.60 78.60 80.52 82.56 84.48 82.40 94.44 96.36 100.32 102.36 104.28 110.40 112.20 114.21 116.16 \$89.04 91.08 93.60 95.04 96.00 99.00 100.92 102.96 110.86 110.86 112.80 114.84 116.76 120.72 122.76 124.68 126.64 139.60 132.60 134.64 156.64 \$28.60 \$33.60 \$80. \$37 34.45 35.50 36 10 37.95 39.00 39.60 29.45 30.50 6 ins. 7 ins. 1124034C 1124034D 1124034E 1124034F 1124034G 1124034H 124042D 124042E 124042F 31.10 40.00 41.25 42.05 42.90 31.50 32.75 33.55 34.40 8 ins. 9 ins. 36.50 37.75 38.55 39.40 40.20 41.85 42.70 43.50 44.35 44.35 45.15 46.80 47.65 50.10 51.75 124042G 124042H 92 52 94 56 96 48 100 44 102 48 104 40 106 44 108 38 112 32 114 38 115 28 120 24 122 40 124 20 126 28 128 16 10 ins. 1124042H 1124042K 1124042M 1124042N 1124042N 1124042P 1124042R 1124042B 1124042B 1124042V 1124042V 1124042V 1124042V 11 ins. 1124034H 1124034K 1124034M 1124034N 1124034P 35.20 36.85 37.70 38.50 39.35 43, 70 45, 38 46, 24 47, 00 47, 85 48, 65 50, 30 51, 15 53, 60 54, 50 55, 25 56, 10 56, 90 12 ins. 14 ins. 15 ins. 16 ins. 17 ins. 18 ins. 39.35 40.15 41.80 42.65 43.45 45.10 46.00 46.75 47.60 124034Q 124034 R 20 ins. 21 ins. 124034S 124034T 124034U 22 ins. 24 ins. 124034V 124034W 124034X 1124034Y 25 ins. 26 ins. 52.60 53.40 55.10 27 ins 1124042X 1124042Y 28 ins. 48.40 50.10 122 132 24 58. 30 ins.

National Electrical Code Standard.

#### **BRYANT SOCKETS**



No. 9366



No. 399



No. 43310



No. 60666

## Weatherproof Sockets

660 Watts, 600 Volts

Schedule "B"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. • List Each	W. E. List Each
93664	Porcelain, for W. P. Shade Holder	10	250	80	\$0.20	\$0.48
399▲	Porcelain W. P. Socket	10	250	75	. 125	.30
43310	Molded W. P. Socket	10	250	60	.22	. 54
60666	Composition W. P. Socket	10	250	85	.24	. 58
50788	Hard Rubber W. P. Socket	10	250	60	1.00	2.40

The above sockets are fitted with 6 inches of No. 14 B. & S. Stranded Rubber-covered Wire. Sockets with longer wires furnished on special order. Extra charge, \$0.22 per foot. Mfrs. List \$0.09 (\$0.11 each conductor). Mfrs. List \$0.045.



No. 43311



No. 43314



No. 9448

## Weatherproof Bracket Sockets

660 Watts, 250 Volts

Schedule "B"

List No.		Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
43311	Molded, 1/8 inch, wires inside of pipe	10	100		\$0.60	\$1.44
43312	Molded, 3/8 inch, wires inside of pipe	10	100	30	.60	1.44
<b>*4</b> 3313 <b>*</b>	Molded, 1/8 inch, wires outside of pipe	10	100	30	.60	1.44
<b>*43314*</b>	Molded, % inch, wires outside of pipe	10	100	30	.60	1.44
9448	Porcelain, 1/8 inch, brass cap, polished and lacquered	10	100	40	.60	1.44
9496	Porcelain, 3/8 inch, brass cap, polished and lacquered	10	100	45	.725	1.44

The above sockets are fitted with 6 inches of No. 18 B. & S. Solid Rubber-covered Fixture Wire. Sockets with longer wires will be furnished on special order. Extra charge, \$0.22 per foot. Mfrs. List \$0.09 (\$0.11 each conductor). Mfrs. List \$0.045.

- These sockets are approved for 660 watts, 600 volts.
- ▲ National Electrical Code Standard.



#### BRYANT SOCKETS AND RECEPTACLES

660 Watts, 600 Volts







No. 9407

No. 44912

## Bragdon Weatherproof Sockets

Schedule "B"

Extension edge carries the drip away from the lamp and socket. Method of wiring at the top removes the strain from the socket itself and places it on the porcelain. Extra hole in porcelain at top allows for independent suspension, if desired.

List No.	Description	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
50997▲	Weatherproof Socket		10	250	165	\$0.50	\$1.20

## Weatherproof Receptacles

Schedule "B"

9407^	With side wires.	2 3 ins.	10	100	79	\$0.40	\$0.96
44912*	Outside diameter of base is 2¾ inches.  Pony, with side wires.  Outside diameter of base 1∰ inches.	2 ins.	10	100	55	.35	. 84







No. 9411



Schedule "B"

## Weatherproof Receptacles

List No.	Description	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
9408	With bottom wires	21/4 ins.	10	100	80	\$0.40	\$0.96
9411	Outside diameter of base is 211 inches.  Pony, with bottom wires  Outside diameter of base is 23% inches.	23/8 ins.	10	100	57	. 35	.84
30000	Angle, with side wires		10	100	85	. 45	1.08

The above sockets and receptacles are fitted with 6 inches of No. 14 B. & S. Stranded Rubber-covered Wire. Sockets and receptacles with longer wires furnished on special order. Extra charge, \$0.22 per foot. Mfrs. List \$0.09 (\$0.11 each conductor). Mfrs. List \$0.045. Digitized by Google

<sup>▲</sup> National Electrical Code Standard.

# BRYANT SOCKETS AND RECEPTACLES 75 Watts, 125 Volts













Miniature and Candelabra Sockets

Schedule "H"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
433▲	Miniature Key, 1/8 inch cap	25	100	20	\$0.33	\$0.96
434▲	Candelabra Key, 1/8 inch cap	25	100	23	.33	.96
320▲	Miniature Keyless, 1/8 inch cap	50	200	17	.2325	. 66
3214	Candelabra Keyless, 1/8 inch cap	50	200	19	.235	. 68
470	Miniature Keyless, snap shell, 1/8 inch cap	50	200	15	.2325	. 66
471	Candelabra Keyless, snap shell, 1/8 inch cap	50	200	17	.235	. 68
385▲	Miniature Pull, 1/8 inch cap	10	50	10	.60	1.74
386▲	Candelabra Pull, 1/8 inch cap	10	50	12	.60	1.74
473	Miniature Turn Socket, 1/8 inch cap	10	50	7	.60	1.74
474	Candelabra Turn Socket, 1/8 inch cap	10	50	8	.60	1.74
*327▲	Miniature, for candle fixture	50	200	9	.12	.36
*328*	Candelabra, for candle fixture	50	200	10	.12	.36
†346▲	Miniature, for candle fixture	50	200	10	.12	.36
†347▲	Candelabra, for candle fixture	50	200	11	.12	.36

\*The supporting studs are threaded .312 inch, 27 threads per inch.

†The nipples are 1/8 inch for pipe, .405 inch outside diameter, 27 threads per inch.







No. 367



No. 9445

BRYANT.

No. 325

# Weatherproof Pendent Sockets

#### Schedule "H"

	<u> </u>					
List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
322▲ 323▲	Miniature, Pendent Socket	25 25	200 200	9 10	\$0.12 .135	\$0.36 .40

Each socket fitted with 6 inches of No. 18 B. & S. Stranded Rubber-covered Wire. Sockets with longer wires furnished on special order. Extra charge, \$0.22 per foot, Mfrs. List, \$0.09; \$0.11 each conductor, Mfrs. List \$0.45.

Miniature and Candelabra Receptacles Schedule "H"

			-				
List No.	Description	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
366▲	Miniature Receptacle	1 1 ins.	25	200	30	\$0.075	\$0.22
367▲	Candelabra Receptacle	$1\frac{1}{16}$ ins.	25	200	30	.09	. 26
	Outside diameter of base 1 1/6 inches.	1				ŀ	1
<b>944</b> 5	Miniature Receptacle	15 ins.	25	500	30	.065	.20
	Outside diameter of base 1 1 inches.	1					1
9446	Candelabra Receptacle	$1\frac{1}{16}$ ins.	25	500	30	.0725	.21
	Outside diameter of base 1 5 inches.	1				٠	1
324	Miniature, oblong base	$1_{\frac{7}{32}}$ ins.	25	200	24	. 10	.30
325	Candelabra, oblong base	$1\frac{1}{32}$ ins.	25	200	26	. 10	.30
326	Candelabra, oblong base, with spring screwshell	$1\frac{3}{16}$ ins.	25	200	28	. 15	.44

Standard finish is brush brass.

For other finishes see listing on socket finishes.

\*National Electrical Code Standard.



# **BRYANT PORCELAIN ROSETTES**





No. 965



No. 1501





No. 298

# Bryant Cleat Rosette with covered connections

Schedule "H"

List No.	Description	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
565	Fuseless Rosette 3 amp. 250 volts	1½ ins.	20	250	125	\$0.20	\$0.70
965▲		1½ ins.	20	250	125	.26	.76

# Bryant Junior Rosettes

FUSIBLE, 2 AMPERES, 125 VOLTS

Caps are interchangeable and will fit any Bryant "Junior" Rosette Base.

Schedule "H"

List No.	Description	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
1501	"Junior" Rosette, cleat	15/8 ins.	10	250	115	\$0.16	\$0.46
*1502*	"Junior" Rosette, concealed	$1\frac{5}{8}$ ins.	10	250	130	.16	.46
1503	"Junior" Rosette, molding	15% ins.	10	250	125	.16	. 46

FUSELESS.	TWO	PIECE.	3	AMPERES.	250	VOLTS
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Schedule "H"

	"Junior" Rosette, cleat						\$0.44
*298*	"Junior" Rosette, concealed	15% ins.	10		130		.44
299▲	"Junior" Rosette, molding	$1\frac{5}{8}$ ins.	10	250	125	. 15	. 44



No. 1999



No. 368



No. 1499

#### FUSELESS, ONE PIECE, 3 AMPERES, 250 VOLTS

Schedule "H"

List No.	Description	Screws Spaced on Centers	Carton	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
		on Centers	Quantity	PKg.	LD9.	Lacu	Eacn
1999▲	"Junior" Rosette, cleat and concealed combined.	11/4 ins.	10	250	70	\$0.08	\$0.24
384▲	"Junior" Rosette, 2-wire molding	$1\frac{1}{4}$ ins.	10	250	145	.08	. 24

WITH BASE FOR 31/4 INCH CONDUIT BOX Schedule							e "H"
†368 <b>^</b> ‡369 <b>^</b>	"Junior" Rosette, fusible" "Junior" Rosette, fuseless	$2\frac{3}{4}$ ins. $2\frac{3}{4}$ ins.	1 1	100 100	220 210	\$0.32 .30	\$0.92 .88

Outside diameter of base is 3½ inches.

## K.-P. Fuseless Rosettes

3 4	٩m١	peres,	, 250	Vo	its
-----	-----	--------	-------	----	-----

Schedule "H"

1499	KP. Rosette, cleat	$2\frac{1}{2}$ ins.	10	250	310	\$0.16	\$0.46
<b>1710</b> ▲	KP. Rosette, concealed	2½ ins.	10	250	290	. 16	.46

Outside diameter of base is 3½ inches. \*Outside diameter of base is 2¾ inches. †Rating: 2 amperes, 125 volts. ‡Rating: 3 amperes, 250 volts. \*National Electrical Code Standard.

### **BRYANT PORCELAIN ROSETTES**





NO. 8/3



# Bryant K.-W. Rosettes

Fusible, 2 Amperes, 125 Volts

Caps are interchangeable and will fit any K.-W. Rosette base.

Schedule "H"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
950 <sup>4</sup> 870 ‡871 <sup>4</sup> 926 1426 872	Cleat Rosette, with stamped lugs. Cleat Rosette, with cast lugs. Concealed Rosette. Rosette for two-wire molding. Rosette for three-wire molding. Combination Rosette.	10 10 10	250 250 250 250 250 250 250	165 170 155 155 205 160	\$0.26 .26 .26 .26 .26 .26	\$0.76 .76 .76 .76 .76

Outside diameter of base is 21/8 inches. Holes for supporting screws are spaced 15/8 inches on centers.

# Bryant K.-W. Bracket Rosettes

Fusible, 2 Amperes, 125 Volts With Brass Face Plate

Caps are interchangeable and will fit any K.-W. Rosette base.

Schedule "H"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
*873* 1176* 1177 287 1402	Bracket Rosette, concealed Bracket Rosette, cleat Bracket Rosette, 2-wire molding Bracket Rosette, 3-wire molding. Bracket Rosette, combination	10 10 10	100 100 100 100 100	72 75 71 80 72	\$0.36 .36 .36 .36 .36	\$1.04 1.04 1.04 1.04 1.04

#### With Brass Thimble

Schedule "H"

*1073* 1178* 1179 288 1403	Bracket Rosette, concealed Bracket Rosette, cleat Bracket Rosette, 2-wire molding Bracket Rosette, 3-wire molding Bracket Rosette, combination	10 10 10	100 100 100 100 100	72 72 75 80 75	.36 .36	\$1.04 1.04 1.04 1.04 1.04
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 $<sup>^{\</sup>bullet}$  Outside diameter of base is  $2\frac{7}{8}$  inches. centers.

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Holes for supporting screws are spaced 15% inches on

A National Electrical Code Standard.

# "SPARTAN" INTERCHANGEABLE PLUGS AND RECEPTACLES

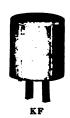














No. 700

"SPARTAN" INTERCHANGEABLE PLUGS AND RECEPTACLES "SPARTAN" PLUG CAPS-10 AMPERES, 250 VOLTS

Schedule "H" Any of these caps can be furnished "polarity" (non-reversible) without extra charge. To specify polarity caps, change the first letter to M, as: MA, MB, MC, etc. Any of these caps can be furnished with the blades set tandem (———) instead of parallel (||) without extra charge. To specify caps with tandem blades, change the first letter to L, as LA, LB, LC, etc.

List No.	Description .	Carton Qnty.	Std. Pkg.	Pkg. Wt.	Mfrs. List	W. E. List Com- plete
KAT KB	Standard plug cap	10 10	50 50	8	\$0.15 .25	\$0 44 78

The standard finish on the cap is brush brass or old brass, which will be shipped when no finish is specified. Polished brass, when specified, will be shipped without extra charge. For other finishes add to list \$0.12; Mfrs. List \$0.05.

KC:	Brass covered	cap with finger grip	10	50	10	\$0.35	/ \$1 02

This cap is offered in response to the demand from certain engineers and others for a cap that provides some means of detaching the cap from its base other than pulling on the conducting cord. Finishes are the same as for KB cap listed above.

KD‡	Elongated cap	10	50	9	\$0.25	\$0.72
m.	-1	N . 40 -			1	

This cap is particularly for use in connection with No. 48 conduit box receptacle when the two are installed in a watertight floor box.

KET   Pilot cap (125 volts)	1 10 1	30	1 12	\$0.95	1 \$2.74
	<u> </u>				

The 2 C.P. 125 volt candelabra base lamp, which forms a part of this device, is connected in multiple with the current consuming device which is connected to the cap.

KF‡	Edison ac	lapter cap ((	360 watts).	 10	30	6	<b>\$</b> 0. <b>20</b>	\$0.88	
		•• •		 			• •		

This device permits the insertion of a medium base lamp in any "Spartan" base, or it may be used as an adapter to connect other makes of Edison attachment plugs into Spartan "bases."

#### "SPARTAN" ATTACHMENT PLUGS-660 WATTS, 250 VOLTS

100	†Edison screw body	10	1 100	15	\$0.10	\$0.30
700	Body with Standard cap	10	100	25	.25	72
KB-100	Body with brass covered cap	10	100	25	. 35	1.02
KC-100	Body with finger grip cap	10	50	25	.45	1.30
KD-100	Body with elongated cap	10	50	30	. 35	1 02
KE-100	Body with pilot cap (125 volts)	10	30	1	1.05	3.04
KF-100	Body with Edison adapter cap	10	l <b>3</b> 0	٠.,	. 30	88

For special finishes on brass covered caps, see listing of KB caps above.

#### "SPARTAN" MULTIPLE CURRENT TAPS-660 WATTS, 250 VOLTS

	~					
101 [	1 Multiple current tap body	10	50	i	<b>\$</b> 0.35	\$1.02
KA-101	Body with Standard cap	10	50		. 50	1 44
KB-101	Body with brass covered cap	10	50		.60	1.74
KC-101	Body with finger grip cap	10	50		.70	2 02
KD-101	Body with elongated cap	10	50		.60	1.74
KE-101	Body with pilot cap (125 volts)	10	30	۱	1.30	3.76
KF-101	Body with Edison adapter cap	10	30	١	. 55	1.60

#### **4SPARTAN" SERIES CURRENT TAPS-660 WATTS. 250 VOLTS**

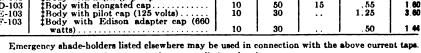
102	1Series current tap body	10	50	 \$0.35	\$1.02
KA-102	Body with Standard cap	10	50	 .50	1.44
KB-102	Body with brass covered cap	10	50	 .60	1.74
KC-102	Body with finger grip cap	10	50	 .70	2.02
KD-102	Body with elongated cap	10	50	 .60	1.74
KF-102	Body with Edison adapter cap	10	30	 .55	1.60

#### "SPARTAN" CORD CONNECTORS-10 AMPERES, 250 VOLTS

	DI ARTAIT CORD COMMEDICAL			,		
103	Cord connector body	10	50	10	\$0.30	\$0 88
.KA-103	Body with Standard cap	10	50	10	.45	1.30
KB-103	Body with brass covered cap	10	50	15	. 55	1.60
KC-103	Body with finger grip cap	10	50	15	. 65	1.88
KD-103	Body with elongated cap	10	50	15	. 55	1.60
KE-103	Body with pilot cap (125 volts)	10	30		1.25	3.60
KF-103	Body with Edison adapter cap (660		i	1	1	1
	watts)	10	1 30	l	.50	1.44

No. 103 Wiring Devices

Nos. 101 and 102



For special finishes on brass covered caps, see listing elsewhere, 1National Electrical Code Standard.

# "SPARTAN" INTERCHANGEABLE PLUGS AND RECEPTACLES



No. KG-103

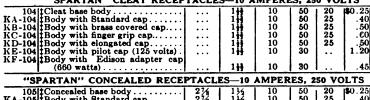


"SPARTAN" MOTOR ATTACHMENT PLUG—10 AMPERES, 250 VOLTS
This device is designed for supplying current to portable current consuming devices such as heaters and vacuum cleaners. The part with the knife blade contacts (measuring 1½ inches in diameter and having holes for supporting screws spaced 1 inch on centers) is permanently attached to the apparatus to which current is to be fed. It is well to so house this part as to protect the contacts from mechanical injury. The body piece is attached to the conductors which supply the current and, as all live parts are completely enclosed, it is impossible for a short circuit or ground to occur should this part, when disconnected from the apparatus, come in contact with some conducting material.



No. 104

"SPARTAN" CLEAT RECEPTACLES—10 AMPERES, 250 VOLTS									
	Motor Attachment Plug cap Motor attachment plug, complete		···.	10 10	50 50	10 15	\$0.20 .50		
List No.	Description	Diam. of Base Inches	Screws Spaced on Centers Inches	Carton	Std. Pkg.		Mfrs. List Each	W. E. List Each	



"SPARTAN" CONCEALED RECE	PTACLI	ES-10	AMPER	RES, 2	250 VC	LTS	
105 Concealed base body	27/8	13/2	10	50		\$0.25	
KA-105 Body with Standard cap		11/2	10	50	25	.40	
KB-105 Body with brass covered cap	276	11/4	10	50	25	. 50	1.44
KC-105 Body with finger grip cap	21/8	13/2	10	50	25	. 60	
KD-105 Body with elongated cap	21/8	134	10	50	25		1.44
KE-105 Body with pilot cap (125 volts).	21/6	13%	10	30		1.20	3.46
KF-105 Body with Edison adapter cap			١	٠	1	ا ـ ا	1 00
(660 watts)	2 1/8	13%	10	30	1	1 .45	1.30



No. 105

No. 106

"SPARTAN" RECEPTACLES WITH ONE-WAY BASE FOR METAL MOLDING 10 AMPERES, 250 VOLTS

106 ‡One-way body	 	10	50		\$0.25L	\$0.72
KA-106 Body with Standard cap		10	50	23	.40	1.16
KB-106 Body with brass covered cap	 	10	50	23	.50	1.44
KC-106 Body with finger grip cap		10	50	23	.60	1.74
KD-106 Body with elongated cap	 	10	50	25	. 50	1.44
KE-106 Body with pilot cap (125 volts)		10	30	١	1.20	3.48
KF-106 Body, with Edison adapter cap	•		1		1	
(660 watta)		10	<b>3</b> 0	١	1 .45	1.30

"SPARTAN" RECEPTACLES WITH TWO-WAY BASE FOR METAL MOLDING
10 AMPERES, 250 VOLTS



No. 107

IV AIII LI	IV AMI ERED, DO VOLTO											
107 Two-way body			10	50	20	\$0.25	\$0.72					
KA-107 Body with Standard cap			10	50	23	.40						
KB-107 Body with brass covered cap			10	50	23	. 50						
KC-107 Body with finger grip cap			10	50	23	.60						
KD-107 Body with elongated cap			10	50	25	. 50						
KE-107 Body with pilot cap (125 volts)			10	30	• • •	1.20	3.48					
KF-107 Body with Edison adapter cap			••			ا ا						
(880 we++=)	1	1	10	30		1 451	130					

"SPARTAN" RECEPTACLES FOR 1/4 AND 1/4 INCH PIPE TAPLETS AND WOOD MOLDING—10 AMPERES, 250 VOLTS



No. 108

MOLDING—10 AMPERES, 250 VOLIS										
108 tTaplet body  KA-108 tBody with Standard cap  KB-108 tBody with brase covered cap  KC-108 tBody with finger grip cap  KD-108 tBody with elongated cap		2 ts 2 ts 2 ts 2 ts 2 ts 2 ts 2 ts 2 ts	10 10 10 10 10 10	50 50 50 50 50 50 30	20 23 23 23 23 25	\$0.35 \$1.02 .50 1.44 .60 1.74 .70 2.02 .60 1.70 1.30 3.78				
(660 watts)	<u> l</u>	2₩	10	30		.55 1.60				

"SPARTAN" RECEPTACLES FOR 1/2 INCH OBROUND CONDULETS



No. 109

10 AMPER	E3, 231	, volis	•				
109itCondulet body			10	100	1	\$0.40	\$1.16
KA-109 Body with Standard cap		1	10	50	١.,	. 55	1.60
KB-109 Body with brass covered cap		1	10	50	١	. 65	
KC-109 Body with finger grip cap			10	50	١	.75	2 16
KD-109 Body with elongated cap		۱ ۱	10	50	٠.	. 65	
KE-109 Body with pilot cap (125 volts)		l I	10	30		1.35	3.90
KF-109 Body with Edison adapter cap		1 1			1		
(600 watts)			10	30	١	1 ,601	1.74

For special finishes on brass covered caps, see listing elsewhere.

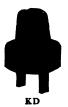
National Electrical Code Standard.

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Wiring Devices

# "SPARTAN" INTERCHANGEABLE PLUGS AND RECEPTACLES









No. 110

#### "SPARTAN" RECEPTACLES FOR 1/2 INCH OBROUND CONDULETS 10 AMPERES, 250 VOLTS Schedule "H"



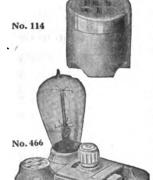








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Wiring Devices

List No.	Description	Diam. of Base Inches	Screws Spaced on Centers Inches	ton	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
*110	Condulet body			10	100		\$0.45	\$1.30
KA-110	Body with Standard cap			10	50		.60	1.74
KB-110	Body with brass covered cap			10	50		.70	2.02
KC-110	Body with finger grip cap			10	50		.80	2.32
KD-110	Body with elongated cap			10	50	1420	.70	2.02
KE-110	Body with pilot cap (125 volts).			10	30		1.04	4.04
	Body with Edison adapter cap					1		
,	(660 watts)			10	30		.65	1.88

# "SPARTAN" RECEPTACLES WITH BASE FOR ADAPTIBOXES

10 Ami ERE	200	* OLIL	,				
*111 Adaptibox body	27/8	25	1 10	50	25	(\$0.35)	\$1.02
*KA-111 Body with Standard cap	27/8	25	10	50	28	.50	1.44
*KB-111 Body with brass covered cap	27/8	216	10	50	28	.60	1.74
*KC-111 Body with finger grip cap	27/8	25	10	50	28	.70	2.02
*KD-111 Body with elongated cap	23/8	216	10	50	30	.60	1.74
*KE-111 Body with pilot cap (125 volts). *KF-111 Body with Edison adapter cap	278 278 278 278 278 278 278 278	25	10	30		1.30	3.76
(660 watts)	27/8	25	10	30		.55	1.60

"SPARTAN" RECEPTACLES WITH BASE FOR CONDUIT BOXES 10 AMPERES, 250 VOLTS

	,			-			
▲112 Conduit box body	13/4	5/8	10	50	20	180.25	\$0.72
*KA-112 Body with Standard cap	134	5/8	10	50	23	.40	1.16
*KB-112 Body with brass covered cap	134	5/8	10	50	23	.50	1.44
*KC-112 Body with finger grip cap	13/4	5/8	10	50	23	.60	1.74
*KD-112 Body with elongated cap	134	5/8	10	50	25	.50	1.44
*KE-112 Body with pilot cap (125 volts). *KF-112 Body with Edison adapter cap	134	5/8	10	30		1.20	3.46
(660 watts)	134	5/8	10	30		.45	1.30

#### "SPARTAN" RECEPTACLES WITH BASE FOR CONDUIT BOXES 10 AMPERES, 250 VOLTS

This receptacle is specially designed to be installed in a 4 inch octagon box of the standard type. The neck of the receptacle is threaded the same as ½ inch conduit and can, therefore, be inserted in any ½ inch knockout and secured by a ½ inch lock nut. When octagon boxes are used for surface work, this receptacle is extremely useful as the binding posts are so arranged as to be easily accessible after the box has been installed, so that additional taps for drop cords or the like can be taken off at any time with a very slight expenditure of labor.

*113 Conduit box body	 1	1 10 1	50	 180.251	\$0.72
*KA-113 Body with Standard cap	 	10	50	 .40	1.16
*KB-113 Body with brass covered cap	 	10	50	 .50	1.44
*KC-113 Body with finger grip cap	 	10	50	 .60	1.74
*KD-113 Body with elongated cap	 	10	50	 .50	1.44
*KE-113 Body with pilot cap (125 volts).	 	10	30	 1.20	3.46
*KF-113 Body with Edison adapter cap	TO A HER	1	2,300		
(660 watts)	 	10	30	 .45	1.30

# "SPARTAN" RECEPTACLES FOR CONDUIT BOX COVERS 10 AMPERES, 250 VOLTS This receptacle is similar in construction to No. 4072 Sign Receptacle listed elsewhere.

It may be attached to any outlet box cover having a hole  $1_{1\overline{1}}$  inches in diameter. No notch or lug is necessary, as the receptacle is prevented from turning by three fins in the inner porcelain which bite into the metal of the cover. The outside diameter of the body of the receptacle is 13/4 inches.

*114 Conduit cover body	 	10 1	50	44	\$0.25	\$0.72
*KA-114 Body with Standard cap	 	10	50	400	.40	1.16
*KB-114 Body with brass covered cap	 	10	50		.50	1.44
*KC-114 Body with finger grip cap	 	10	50		.60	1.74
*KD-114 Body with elongated cap	 	10	50		.50	1.44
*KE-114 Body with pilot cap (125 volts).	 	10	30		1.20	3.46
*KF-114 Body with Edison adapter cap	 1111-36	10	30		.45	1.30

For special finishes on brass covered caps, see listing elsewhere.

"SPARTAN" SURFACE HEATER CONTROL COMBINATION

†This device is listed elsewhere. \*National Electrical Code Standard.

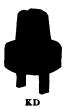
List price, standard package, etc., of KJ is the same as KA listed elsewhere.

# "SPARTAN" INTERCHANGEABLE PLUGS AND RECEPTACLES



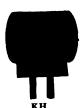












No. 115

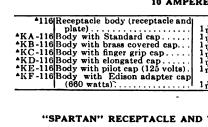


"SPARTAN" FLUSH RECEPTACLES WITH ROUND PLATE 10 AMPERES, 250 VOLTS Schedule "H"

•List No.	Description	Diam. Body Inches	Diam. of Plate Inches	on Centers	Car- ton Qnty.	Std. Pkg.		Mfrs. List Each	W. E. List Each
*KA-115 *KB-115 *KC-115 *KD-115 *KE-115	Receptacle body (receptacle aud plate). Body with Standard cap Body with brass covered cap Body with finger grip cap Body with elongated cap Body with pilot cap (125 volts) Body with Edison adapter cap (660 watts).	1 to 1 to 1 to 1 to 1 to 1 to 1 to 1 to	234 234 234 234 234 234 234	17/8 17/8 17/8 17/8 17/8 17/8	1 1 1 1 1 1 1	50 50 50 50 50 30	::	\$0.85 1.00 1.10 1.20 1.10 1.80	\$2.46 2.88 3.18 3.46 3.18 5.20

#### No. 116

#### "SPARTAN" RECEPTACLES FOR 31/4 INCH OUTLET BOXES 10 AMPERES, 250 VOLTS



| Screws| | |

#### "SPARTAN" RECEPTACLE AND TYPE "O" SWITCH COMBINATION 10 AMPERES, 250 VOLTS

This device is a combination of a "Spartan" Flush Receptacle and a Type "O" double pole, indicating flush switch, ready wired, and designed to be installed in a standard single switch

box. The line wires may be attached to either end of the device. If attached to the switch end, the switch controls the receptacle as well as the outgoing circuit; but if attached to the receptacle end, current may be taken off through the receptacle irrespective of the position of the switch, which will control only the other outgoing circuit.

For "combination plates" (defined elsewhere) specify "W" sections for this device.



No 117

No. 467



No. 558

	*List No.	Description	Diam. of Plate Inches	Spaced on Centers Inches	ton	Std.	Mfrs. List Each	W. E. List Each
		Device, complete, without cap		3 3 3	1		\$2.00	\$5.76
		Body with Standard cap Body with brass covered cap		3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1	10	2.15	6.20
		Body with finger grip cap		3 9 37	î	10	2.35	6.78
ı	*KD-117	Body with elongated cap	41/2 x 23/4	3 9 3 2	1	10	2.25	6.48
ı	*KE-117	Body with pilot cap (125 volts)	41/2 x 23/4	311	1	10	2.95	8.50
	-KF-117	Body with Edison adapter cap (660 watts)	41/2 x 23/4	337	1	10	2.20	6.34

#### "SPARTAN" FLUSH HEATER CONTROL COMBINATION

This device is listed elsewhere. 467

This device is listed elsewhere.

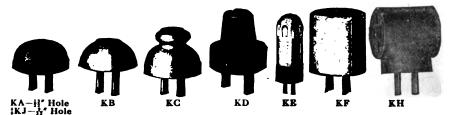
\*Receptacles will regularly be shipped with the porcelain bases, which project through the plate, glazed black. White, when specified, will be shipped without extra charge.

List price, standard package, etc., of KJ is the same as KA, listed elsewhere.

ANational Electrical Code Standard. Digitized by GOS Wiring Devices

# "SPARTAN" INTERCHANGEABLE PLUGS AND RECEPTACLES





Schedule "H" "SPARTAN" STANDARD FLUSH RECEPTACLES—10 AMPERES 250 VOLTS For "Combination Plates" specify "F" sections to accommodate these receptacles.

List No.	Description	Pack. Wt. Pds.	Car- ton	Stan. Pack.	Mírs. List Each	W. E. List Each
120	Flush Receptacle Body	28	10	50	\$0.60	\$0.72
KA-120	Body with Standard Cap	28	10	50	.75	.90
KB-120	△Body with Brass Covered Cap	28	10	50	.85	1.02
KC-120	Body with Finger Grip Cap	28	10	50	.95	1.14
KD-120	Body with Elongated Cap	30	10	50	.85	1.02
KE-120	Body with Pilot Cap (125 volts)		10	30	1.55	1.86
KF-120	Body with Edison Adapter Cap (660 watts)	١	10	30	.80	.98
KH-120	▲Body with Duplex Adapter		10	30	1.30	1.56
0	119			. T		

Outside supporting screw holes are spaced 3 1/2 inches on centers. Inside supporting screw holes are spaced 2 1 inches on centers.

For special finishes on Brass Covered Caps, see listing elsewhere.

Receptacles will regularly be shipped with the porcelain boss, which projects through the plate, glazed black. White, when specified, will be shipped without extra charge.

PLATES FOR "SPARTAN" STANDARD FLUSH RECEPTACLES

These plates are also listed elsewhere for use in connection with other Flush Schedule "H" Receptacles.

429 Single Plate, stamped, $\frac{1}{16}$ in., $4\frac{1}{2} \times 2\frac{3}{4} \dots$	25	1 *	\$0.35	\$0.42
545 Single Plate, solid, 41/2 x 23/4	25	*	.50	.60
529 Two-gang Plate, solid, 4½ x 4%	10		1.00	1.20
530 Three-gang Plate, solid, $4\frac{1}{2} \times 6\frac{3}{8}$	5		1.50	1.80
531 Four-gang Plate, solid, 4½ x 83	5	*	2.00	2.40
360 Two-gang Combination Plate, 4½ x 4 16,	l		1 1	
040 inch thick, for Standard Push Button	l	1		
Switch and No. 120 "Spartan" Receptacle	10	50	.40	.48

Receptacles in gangs are spaced  $1\frac{3}{16}$  inches on centers. See listing elsewhere for special finishes on the above plates.



Each Outlet 10 Amperes 250 Volts Schedule "H"
For "combination plates" specify "V" sections to accommodate the sereceptacles.

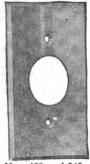
List No.	Description	Screws Spaced on Centers Ins.	Car. Qnty.		Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
122	Duplex Receptacle Body	3 9 32	10	50	40	\$0.85	\$1.48
	*Body with two Standard Caps	3 9	10	50	1	1.15	1.99
KB-122	*Body with two Brass Covered Caps	3 9 3 2	10	50		1.35	2.34
	*Body with two Finger Grip Caps	3 9 3 2	10	50		1.35	2.69
KD-122	*Body with two Elongated Caps	$3\frac{9}{32}$	10	50		1.35	2.34
KE-122	*Body with two Pilot Caps (125 volts)	3 9	1	30		2.75	4.75
KF-122	*Body with two Edison Adapter Caps				100	N. 1992	
	(660 watts)	3 9 3 2	1	30		1.25	2.16
	PLATES FOR "SPARTAN" DUP	LEX	RECI	EPTA	CLE	S	
*****	AC: 1 DI 4 1 1 1 1 41/ 09/		1 05	1	1 15	1 00 40	1 60 70

en 70				PLATES FOR "SPARTAN" DUP
QU. 10	\$0.40	19	 25	 *550  Single Plate, stamped, \(\frac{1}{16}\) in., 4\(\frac{1}{2}\) x 2\(\frac{3}{4}\).
1.13	.65		 25	 *551 Single Plate, solid, 4½ x 2¾
2.26	1.30		 10	 *552 Two-gang Plate, solid, 4½ x 4 16
3.37	1.95		 5	 *553 Three-gang Plate, solid, $4\frac{1}{2} \times 6\frac{3}{8}$
4.50	2.60			*554 Four-gang Plate, solid, $4\frac{1}{2} \times 8\frac{3}{16} \dots$

Receptacles in gangs are spaced  $1\frac{1}{16}$  inches on centers. See listing elsewhere for special finishes on the above plates.

\*A standard package of plates consists of a sufficient number to accommodate 50 single receptacles. \*National Electrical Code Standard.

†A standard package of plates consists of a sufficient number to accommodate 50 Duplex receptacles. ‡List price, standard package, etc.; of KJ is the same as KA.



Nos. 429 and 545 % Actual Size



No. 122 % Actual Size



No. 550 & 551 % Actual Size Wiring Devices

# BRYANT FLUSH RECEPTACLES







Nos. 281, 282 and 283



Nos. 1708 and 1709



Nos. 546 and 547

	Chapman Recepta	cles			Sched	ule "H"
List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lhs.	Mfrs. List Each	W. E. List Each
1363▲	Gang Receptacle 12 amperes, 250 volts	10	100	50	\$0.40	\$0.96
1110	Porcelain Plug	25	100	10	.20	.48
486	Porcelain Polarity Plug	25	100	10	.20	.48
397	Indestructible Plug	25	25	3	.40	.96
472	Chapman to Edison (Twin) Adapter	10	10	6	.50	1.20
Milde.	Plates for Chapman Recept	acles		Seles .	Sched	ule "H"
1364	Plate for 1 Receptacle, 4½ x 2¾ inches	25	*	1 .30	\$0.45	\$1.08
543	Single Plate Solid	25	*	30	.70	1.68
1365▲	Plate for 2 Receptacles, 4½ x 4 16 inches	10		55	1.40	3.36
13664	Plate for 3 Receptacles, 4½ x 63/8 inches	5		100	2.10	5.04
13674	Plate for 4 Receptacles, 4½ x 8 16 inches	5	*	120	2.80	6.72
	(Old Style) Chapman Re	ecepta	cles		Sched	ule "H"
†281 282 283	Chapman Gang Receptacle Single Plate, 4½ x 2½ inches Chapman Plug	5 25 5	25 25 25	15 12 4	\$0.70 .65 .50	\$1.68 1.56 1.20

Schedule "H" Bryant Screw Plug Flush Receptacles

This Receptacle will receive any standard Edison Attachment Plug and will be found useful where it is desirable to transfer a connection from a chandelier or bracket. In designing the Receptacle, we have em-

bodied, so	far as practicable, the features of the Chapman Recept	acle.		•	•	
†1708 <b>^</b>	Screw Plug Gang Receptacle 660 watts 250 volts	10	100	53	\$0.30 [	\$0.72
1709^	Single Plate, with lid 41/2 x 23/4 inches	25	100	45	.40	. 96
	Plates With Lid		1 .			
544	Single Plate, solid, 4½ x 2¾ inches	25	•	30	.60	1.44
526	Two Gang Plate, solid, $4\frac{1}{2} \times 4\frac{9}{16}$ inches	10		40	1.20	2.88
527	Three Gang Plate, solid, $4\frac{1}{2} \times 6\frac{3}{8}$ inches	5	1 • I	35	1.80	4.32
528	Four Gang Plate, solid, $4\frac{1}{2} \times 8\frac{3}{16}$ inches	5	•	30	2.40	5.76
_† <b>†42</b> 9^	Single Plate, without lid 4½ x 2¾ inches	<b>25</b>	100	,	.35	. 84
	Plates Without Lid					
545	Single Plate, solid, 4½ x 2¾ inches	25	1 * i	Ü	\$0.50 j	\$1 20
$\tilde{529}$	Two Gang Plate, solid, $4\frac{1}{2} \times 4\frac{1}{16}$ inches	10	•	37	1.00	2.40
530	Three Gang Plate, solid, $4\frac{1}{2} \times 6\frac{3}{8}$ inches	5		36	1.50	3.60
531	Four Gang Plate, solid, $4\frac{1}{2} \times 8\frac{3}{16}$ inches	5		35	2.00	4.80
	Duplex Screw Plug Flush Rec	eptacle				
546	Duplex Receptacle	10	30		\$0.45	\$1.08
547	Solid Plate, with lid, 23/4 x 41/2 inches	25	25		.80	1.92
548	Solid Plate, without lid. 23/x 41/6 inches	25	25	r,	.60	1.44

Outside supporting screw holes,  $3\frac{1}{12}$  inches on centers. Inside supporting screw holes,  $2\frac{11}{12}$  inches on centers.

†Plates for mounting these Receptacles in gangs will be furnished on special order. When so mounted, the Receptacle will be spaced 1 1 inches on centers.

Plate No. 429 is necessary when the Receptacle is used for a pilot lamp.

††This plate may be used with No. 475 Receptacle.

For special finishes on flush plates see page to follow.

\*A standard package of Chapman Plates consists of a sufficient number to accommodate 100 Receptacles

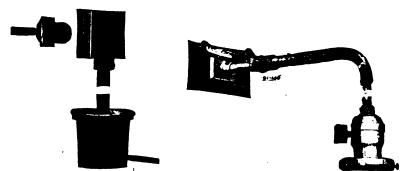
\*National Electrical Code Standard.

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#### **BRYANT FLUSH RECEPTACLES**







Nos. 430, 489 and 490

# Disappearing Door Flush Receptacle

10 Amperes, 250 Volts

Schedule "H"

The doors open and close automatically with the insertion and withdrawal of the plug. This makes the receptacle suitable for floor as well as baseboard use, as dirt and dust cannot enter.

List	D	Screw Holes on Centers		Carton	Std.	Pkg.	Mfrs.	W. E.
No.	Description	Outside		Quantity	Pkg.	Wt. Lbs.	List Fach	List Each
4304	"D. D." Gang Receptacle	3 1 ins.	211 ins.	10	30	15	\$0.50	\$1.20
432	D. D. Plug, Brass Encased			10	30		.60	1.44
494	D. D. Plug, without metal cover			10	30		.60	1.44
539	D. D. Plug Polarity, Brass Covered			10	30	6	.60	1.44
4314	Single Plate, 4½ x 2¾ inches	!		25	*	١	.45	1.08
<b>520</b>	Single Plate, solid	4 ½ ins.	23/4 ins.	25	•	12	.70	1.68
523	Two Gang Plate, solid		$4\frac{9}{18}$ ins.	10	*	15	1.40	3.36
524	Three Gang Plate, solid	$4\frac{1}{2}$ ins.	63% ins.	5	*	14	2.10	5.04
525	Four Gang Plate, solid	$4\frac{1}{2}$ ins.	$8\frac{3}{16}$ ins.	5		13	2.80	6.72

Plates for mounting these Receptacles in gangs will be furnished only on special order. When so mounted, the Receptacles will be spaced 11 inches on centers.

#### D. D. FLOOR OUTLETS

Schedule "H"

List No.	Description	Carton Quantity	Std. Pkg.	Wt.	List Each	List Each
	d Receptacle (includes plate but not plug) or Box and Receptacle (includes plates		10		\$2.00	\$4.80
	B)	1	5	<u></u>	5.00	12.00

D. D. HOTEL BRACKETS				Schedul	
489   Special D. D. Plate for bracket use 490   Combination D. D. Plug and Wall Bracket	1	10 10	1:	\$1.00 3.50	\$2.40 8.40

The standard D. D. Receptacle No. 430 is used with the above plate and bracket.

# High Capacity "D.D." Receptacle 25 Amperes, 250 Volts

It should be particularly noted that this Receptacle occupies the space of two standard flush receptacles. No. 2568 high capacity flush switch listed below may be used for controlling the current to this receptacle and these two devices may be mounted together on a single flush plate, in which case a four-gang switch box would be required.

446 <sup>4</sup> 447 <sup>4</sup>	High Capacity Gang Receptacle Single Plate, 4½ x 4½ inches	1	10 10	\$1.50 2.00	
4484	High Capacity Indestructible Plug	î	10	1.50	

This device requires a two-gang box. There are holes for four supporting screws spaced 3 reinches on centers vertically and 11 inches on centers horizontally.

Plates for mounting these Receptacles in gangs will be furnished only on special order. When so mounted, the Receptacles will be spaced 1 1 inches on centers.

Anational Electrical Code Standard.

\* Standard package of D. D. Plates consists of a sufficient number to accommodate 25 receptacles.

Digitized by GOOGIC † With box of solid brass add \$1 to the list.

#### PERKINS FLUSH SWITCHES











# Perkins Push Button Gang Switches

Schedule "H"

List	Description	Amp		Carton	Std.	Pkg. Wt.	Mfrs.	W. E.
No.	Doscription	125 Volts	250 Volts	Quantity	Pkg.	Lbs.	Each	Each
2201	Single Pole	10	5 5	10	100*	60		† <b>\$</b> 1.08
2203▲ 2204▲	Three-PointFour-Point	10 10	5	10 10	50* 10*	30 7	.70 2.00	†1.68   †4.80
2625 <b>^</b> 2626 <b>^</b>	Electrolier, 1, 2, 1 and 2, off Electrolier, 1, 1 and 2, 1, off	5 5	$\frac{2}{2}$	10 10	10 10	• •	1.05	2 .52 2 .52
<b>2627</b>	Electrolier, 1, 1 and 2, 1 and 2 and 3, off.	5	$\bar{2}$	10	10	• •	1.05	2.52
2628 <b>^</b> 2629 <b>^</b>	Electrolier, 1, off, 2, off Electrolier, 1, off, 1 and 2, off	5 5	2 2	10 10	10 10	• • •	$\frac{1.05}{1.05}$	2.52
2630▲	Electrolier, 1, 1 and 2, off	5	$\bar{2}$	10	10		1.05	2.52
2631▲ 2632▲	Electrolier, 1, 2, off or 2 speed Fan Motor Electrolier, 1, 2, 3, off or 3 speed Fan	5 5	$\frac{2}{2}$	10 10	10 10	• •	1.05	2.52
2202	Motor	10	10	10	50*	30	1.70	†1.68
2623▲ 2295▲	Double Pole	20 10	20 5	iò	20* 100*	60	1.00	†2.40 2.54
2296	Single Pole, lock	10	5	10	50*	30	1.30	3.12
2297 <b>^</b> 2298 <b>^</b>	Three-Point, lockFour-Point, lock	10 10	5 10	10 10	10* 50*	7 30	2.50 1.30	6.00
2624	Double Pole, lock	20	20		20*		1.50	3.60

# The "Capax" Push Button Switch

10 Amperes, 125 Volts, 5 Amperes, 250 Volts

2701	Single Pole	10	5	10	100	64	\$0.31	†\$0.74
2703	Triple Pole	10	5	10	50	35	. 42	†1.05

# Bryant Push Button Switches

Schedule "H"

List	Description	Amp	oeres	Carton	* Std.	Pkg. Wt.	Mfrs.	W. E.
No.	Descr.ption	125 Volts	250 Volts	Quantity	Pkg.	Lbs.	Each	Each
6014	Single Pole	10	5	10	50		\$0.72	†\$1.73
602	Double Pole	10	10	10	10		.88	†2.11
609▲	Double Pole	20	20	10	10		1.40	†2.36
603	Three-Point	10	5	10	20		.88	†2.11
604▲	Four-Point	10	5	10	10		2.00	14.80
6054	Single Pole, lock	10	5	10	50		1.17	2.30
606▲	Double Pole, lock	10	10	10	10		1.33	2.20
6104	Double Pole, lock	20	20	10	10		1.85	4.45
6074	Three-Point, lock	10	5	10	20"		1.35	2.20
608	Four-Point, lock	10	.5	10	10		2.45	5.88

\*National Electrical Code Standard.

\*Button and lock switches of the same description may be assorted to make up standard package quantity. For instance, No. 601 and 605, No. 2203 and 2296, etc. No other assortment permissible. †For switches with both buttons white ivory, regular length, add \$2.40 to list. Mfrs. List \$1.00.

Outside supporting screw holes, 3% inches on centers.
Inside supporting screw holes, 2% inches on centers.
One No. 2299 Key is furnished with each lock switch.
Switches in gangs will be furnished free upon application.

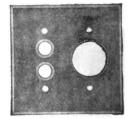
Adjusting frames for aligning Push Button

# PERKINS' PUSH SWITCH PLATES









No. 3650

## Standard Solid Push Switch Plates

In One Horizontal Row

Schedule "H"

List No.	Description	Dimensions Height Width	Carton Quantity	Pkg. Wt. Lbs.	Mfrs. List <b>Each</b>	W. E. List Each
3639	For one switch	41/2 x 23/4 ins.	25	30	\$0.50	\$1.20
3640	For two switches	41/2 x 4 1/6 ins.	10	55	1.00	2.40
3167▲	For three switches	$4\frac{1}{2} \times 6\frac{3}{8}$ ins.	5	100	1.50	3.60
3168▲	For four switches	4 2 x 8 ins.	5	120	2.00	4.80
3169▲	For five switches	$4\frac{1}{2} \times 10^{-1}$ ins.	5	140	3.00	7.20
3170▲	For six switches	$4\frac{1}{2} \times 11\frac{1}{12}$ ins.	1	160	3.60	8.64
3171	For seven switches	$4\frac{1}{2} \times 13\frac{5}{8}$ ins.		180	4.20	10.08
3172	For eight switches	$4\frac{1}{2} \times 15\frac{7}{16}$ ins.	1	220	4.80	11.52
3165▲	For one switch (stamped plates)	$4\frac{1}{2} \times 2\frac{3}{4}$ ins.	25	30	.35	
3166▲	For two switches (stamped plates)	$ 4\frac{1}{2} \times 4\frac{9}{16}$ ins.	10	55	.70	1.68

Switches in gangs spaced 11 inches on centers.

	In One Vertical Ro			_	chedule	
3369 <sup>4</sup>	For two switches. For three switches. For four switches.	8½ x 2¾ ins.	1	8	\$1.20	\$2.88
3370 <sup>4</sup>		11¾ x 2¾ ins.	1	100	1.80	4.32
3371 <sup>4</sup>		15¾ x 2¾ ins.	1	120	2.40	5.76

Switches in "tandem" spaced 35% inches on centers.

# Struck Up Push Switch Plates

	In One Horizontal Row, .	040 Inch Metal		S	chedule	"H"
3665▲	For one switch, square corners	4 1/2 x 23/4 ins.	25	20	\$0.14	\$0.34
3666▲	For two switches, square corners	4½ x 4 ins.	10	40	.28	. 68
3667	For three switches, square corners	$4\frac{1}{2} \times 6\frac{3}{8}$ ins.	5	55	.42	1.02
3634	For four switches	$4\frac{1}{2} \times 8\frac{3}{16}$ ins.	5	18	.88	2.15
<b>3</b> 63 <b>5</b>	For five switches	$4\frac{1}{2} \times 10^{-1}$ ins.	5	16	1.10	2.64
3636	For six switches	4½ x 11   ins.	1	15	1.32	3.18
<b>3</b> 63 <b>7</b>	For seven switches	$4\frac{1}{2} \times 13\frac{5}{8}$ ins.	1	14	1.54	3.70
<b>3</b> 638	For eight switches	$4\frac{1}{2} \times 15\frac{7}{16}$ ins.	1	13	1.76	4.22
3650	Two gang combination plate for standard push button switch and No. 120 Spartan					
	receptacle	$4\frac{1}{2} \times 9$ ins.	10	23	.40	1.92
3631▲	For one switch, round corners	$4\frac{1}{2} \times 2\frac{3}{4}$ ins.	25	20	.14	.34
3632▲	For two switches, round corners	$4\frac{1}{2} \times 4\frac{2}{16}$ ins.	10	40	.28	. 68
3633▲	For three switches, round corners	4½ x 6% ins.	5	55	.42	1.02

#### Push Switch Steel Plates

Brush Brass Finish Schedule "H"

List No.	. Description	Dimensions Height Width	Carton Quantity	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
3621 3622 3623	For one switch. For two switches For three switches	$4\frac{1}{2} \times 4\frac{2}{16}$ ins.	10	20 40 55	\$0.12 .24 .36	\$0.29 .58 .87

The only special finish in which steel plates can be furnished is genuine Bauer Barff, for which add

\$0.87 per switch. Mfrs. List \$0.36.

Note: A standard package of plates for Push Button Switches consists of a sufficient number to accommodate 100 switches

Standard finish, old brass finish. \*National Electrical Code Standard.



## DOOR SWITCH AND RECEPTACLES

## Perkins Automatic Door Switches

#### SINGLE POLE

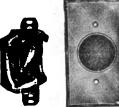
6 Amperes, 125 Volts; 3 Amperes, 250 Volts Schedule "H"



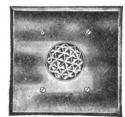
No. 2355

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
2355 <sup>4</sup> 2356 <sup>4</sup>	Circuit closed when door is open Circuit closed when door is closed	1	25 10	15 6	\$2.25 2.25	

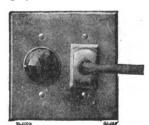
The plate measures  $4\frac{5}{6}$  x  $1\frac{1}{4}$  inches and the holes for supporting screws are spaced 334 inches on centers. The porcelain body is 338 inches long by 1 inch wide.







No. 436



No. 514

# Bull's Eye Receptacles

For Candelabra Base Lamp

Schedule "H"

The outfit consists of a flush plate of standard dimensions, in the center of which is a ruby glass bull's eye. The lighted lamp beneath serves as an effective cautionary or danger signal. The lamp-holding receptacle may be installed individually or may be mounted up in gangs with switches and receptacles and the entire combination covered by a single plate. The many combinations possible are indicated on page to

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
427▲ 428▲	Receptacle with 2 C.P., 125 Volt Candelabra base Lamp Single plate, 4½ x 2¾ inches	10 5	25 25	15	\$1.00 1.25	

Outside supporting screw holes,  $3\frac{9}{32}$  inches on centers.

Inside supporting screw holes, 211 inches on centers.

Plates for mounting these receptacles in gangs will be furnished only on special order. When so mounted the receptacle will be spaced 113 inches on centers.

The above receptacle is designed to receive a Form H (General Electric designation) lamp,

#### For 250 Volt Circuits

When Bull's Eye outfits are wanted for circuits of 200 to 250 volts it is necessary to connect two No. 427 receptacles in series and cover them with a No. 436 plate illustrated above.

436   Single plate 4½ x 4 15 inches
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This device requires a two-gang box. There are holes for four supporting screws spaced 3 1 inches on centers vertically and 111 inches on centers horizontally.

# Ready Wired Bull's Eye Combinations

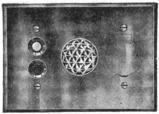
			Schedule "H"			
514▲	Combination of: 1 No. 427 lamp holder with lamp, 1 No. 428			1		
	flush plate, 1 No. 432 DD plug, 1 No. 400 DD receptacle, 1 No. 520 DD plate.	1	10	l	\$4.50	<b>\$</b> 10.80
5154	Combination of: 1 No. 427 lamp holder with lamp, 1 No. 428	-			*****	420.00
	flush plate, 1 No. 2520 receptacle cup, 1 No. 2702 receptacle mechanism, 1 No. 2567 receptacle plug, 1 No. 3639 flush plate	1	10		4.00	9.60

Bull's Eye lights when plug is connected.

ANational Electrical Code Standard.

No. 465

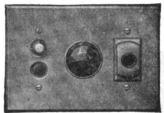
## BRYANT BULL'S-EYE COMBINATIONS



No. 437



No. 558



No. 518



# Ready-wired Bull's-eye Combinations

10 Amperes, 125 Volts

Schedule "H"

List No.	Description	Carton Quantity	Std. Pkg.	Mfrs. List Each	W. E. List Each
465▲	Combination, complete with 125-Volt Lamp and Plate	1	10	\$3.50	\$8.40
469 495	Same combination as 465 with Rotary Lock Flush Switch Combination similar to No. 465 but with 3-point Type O Flush	1	10	4.00	9.60
	Switch instead of double pole switch	1	10	3.50	8.40

No. 465 combination consists of a No. 2494 Type "O" double pole indicating switch mounted in a special porcelain that also provides a receptacle for a candelabra base lamp which is covered by a perforated brass cage so that the lamp cannot be removed without removing the plate. The lamp is in circuit whenever the switch is closed. This outfit may be installed in any standard single switchbox. Outside supporting screw holes,  $3\frac{1}{18}$  inches on centers.

Inside supporting screw holes,  $2\frac{1}{18}$  inches on centers.

Plates for mounting these receptacles in gangs will be furnished only on special order. When so mounted, the receptacles will be spaced 1 1 inches on centers.

# Ready-wired Heater Control Combination 660 Watts, 125 Volts

Schedule "H"

List No.	Description	Carton Quantity		Pkg. Wgt.	Mfrs. List Each	W. E. List Each
437	Combination of: 1 No. 2520 D. P. switch cup, 1 No. 2523 D. P. switch mechanism, 1 No. 3639 flush plate, 1 No. 427 lamp holder with lamp, 1 No. 428 flush plate, 1 No. 1708 plug receptacle, 1 No. 544 flush plate.	1	10	30	<b>\$</b> 5.50	\$13.20
518	10 Amperes, 125 Volts Combination of: 1 No. 2520 D. P. switch cup, 1 No. 2523 D. P.					
	switch mechanism, 1 No. 3639 flush plate, 1 No. 427 lamp holder with lamp, 1 No. 428 flush plate, 1 No. 430 D. P. receptacle, 1 No. 520 flush plate, 1 No. 432 D. D. plug	1	10	35	6.00	14.40
467	Combination of: 1 No. 2520 D. P. switch cup, 1 No. 2523 D. P. switch mechanism, 1 No. 3639 flush plate, 1 No. 427 lamp holder with lamp, 1 No. 428 flush plate, 1 No. 120 spartan receptacle,					
<b>5</b> 58	1 No. 545 "Spartan" plate	1	10	35	5.75	13.80
	switch mechanism, 1 No. 3639 flush plate, 1 No. 427 lamp holder with lamp, 1 No. 122 spartan receptacle, 1 No. 551 spartan plate	1	10	30	6.25	15.00
438	Combination of: 1 No. 2344 D. P. indicating switch, 1 No. 2345 flush plate, 1 No. 427 lamp holder, with lamp, 1 No. 428 flush					
	plate, 1 No. 1363 chapman receptacle, 1 No. 543 chapman plate, 1 No. 397 chapman plug	1	10	30	6.00	14.40

#### PERKINS SPECIAL PLATES

#### SPECIAL FINISHES ON FLUSH PLATES

Schedule "H"

The standard finish on all Flush Plates, unless otherwise noted, is brush brass, which will be supplied on all orders where no other finish is specified. For all other special finishes, except those requiring gold and silver, add \$0.18 (Mirs List \$0.10) per switch or receptacle to the price of the plate in standard finish. Prices on plates in gold and silver finishes will be quoted on application. The only special finish that can be applied to Steel Plates is genuine Bauer Barff, for which add \$0.52 list (Mirs List \$0.36) per

#### PLATES WITH ROUND CORNERS AND ROUND EDGES

Plates with round corners and round edges, other than those listed will be furnished at \$0.27 list (Mfrs List \$0.15) extra for single plates and \$0.09 list (Mfrs List \$0.05) extra for each additional switch or receptacle in gang plates.

#### PLATES WITH ROUND CORNERS AND BEVELED EDGES

Plates with round corners and beveled edges will be furnished at \$0.27 list (Mfrs List \$0.15) extra per plate.

#### SPECIAL SIZE PLATES

Special size plates for standard devices will be sold at a list price of \$0.11 (Mfrs List \$0.06) per square inch in lots of less than 100, and \$0.08 (Mirs List \$0.04) per square inch in lots of 100 or more plates (not gangs) of one size and type When plates are other than rectangular in shape, the area by which the list is determined will be the size of the smallest rectangular piece from which the specified plate can be cut.

Orders for special size plates should always be accompanied by a plainly-marked sketch, giving all dimensions.

#### SPECIAL PLATES

The factory has exceptional facilities for producing promptly anything which may be required in the way of special flush plates. Realizing that special plates are usually more urgently needed than stock material, particular attention is given to all orders covering them and are usually able to make shipment promptly.

Plates which are special in ways not covered above will be quoted upon application.

Nothing in the prices listed above shall be understood to mean that special plates of any description will be furnished at a less price than the corresponding standard plate.

#### **FACE PLATE SCREWS**

Face plate screws when bought separately will list at \$1.35 (Mfrs List \$0.75) per 100; standard package 100 in Schedule "H."

#### **ENGRAVING**

Flush plates will be engraved with words or numbers to indicate the circuits controlled at a list price of \$0.11 (Mfrs List \$0.06) per letter or numeral.

#### ADJUSTING FRAMES FOR FLUSH SWITCHES

Perkins Adjusting Frames make it a simple matter to line up Flush Switches so that the plate will fit. These frames are made for both Push Button and Rotary Switches, and are supplied gratis to users of Perkins Switches.

#### **BLANK PLATES**

Schedule "H"



No. 3546

List No.		Std. Pkg.	Mfrs. List Each	W. E. List Each
3546	Single Plate, stamped, 1/16 inch brass	100 gangs	<b>\$0</b> .35	\$0.84
3551	Single Plate, struck-up, .040 inch brass	100 gangs	.22	. 53
3556	Single Plate, struck-up, .040 inch steel	100 gangs	.12	. 29
3628	Two-gang Plate, stamped, 1/16 inch brass	100 gangs	.70	1.68
3624	Two-gang Plate, struck-up, .040 inch brass.	100 gangs	.44	1.06
3626	Two-gang Plate, struck-up, .040 inch steel	100 gangs	.24	. 58
<b>3</b> 625	Three-gang Plate, struck-up, .040 inch brass.	100 gangs	.66	1.60
3627	Three-gang Plate, struck-up, .040 inch steel	100 gangs	.36	. 87

## TELEPHONE PLATES

#### With One 3/8 Inch Bushing

3616	Single Plate, stamped, 1/16 inch brass Single Plate, struck-up, .040 inch brass	100 gangs	.23	. 56
3617	Single Plate, struck-up, .040 inch steel	100 gangs	. 13	.32

#### With Two 1/8 Inch Bushings

3618	Single Plate, stamped, 1/16 inch brass	100 gangs	\$0.37	\$0.90
3619	Single Plate, struck-up, .040 inch brass Single Plate, struck-up, .040 inch steel	100 gangs	_ 24	. 58
3620	Single Plate, struck-up, .040 inch steelDigitiz	<sub>_</sub> 100 ganga	1016	.34

No. 3618

#### BRYANT-PERKINS COMBINATION PLATES.

Combination plates should be described by using the letters shown below on outline cuts of the respective plates, giving the letters in order from left to right, or from top to bottom, as the devices are to be mounted. The list price will be the sum of the lists as shown. A combination plate cannot be so considered unless it is described by at least two different letters. The standard package quantity is ten plates of one description (not ten gangs).

For combination plates with the different sections arranged tandem or in more than one horizontal row add 20% to the list prices given.

Schedule "H"











W. E. List Each \$3.00 Mfrs. List Each \$1.50

Cat. No. 428 W. E. List Each \$3.00 Mfrs. List Each \$1.25

Cat. No. 543 W. E. List Each \$1.68 Mfrs. List Each \$0.70

Cat. No. 520 W. E. List Each \$1.68 Mfrs. List Each \$0.70

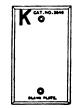
Cat. No. 544 W. E. List Each \$1.44 Mfrs. List Each \$0.60











Cat. No. 545 W. E. List Each \$1.20 Mfrs. List Each \$0.50

W. E. List Each \$1.26 W. E. List Each \$1.30 Mfrs. List Each \$0.52

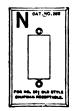
Mfrs. List Each \$0.54

W. E. List Each \$1.20 Mfrs. List Each \$0.50

W. E. List Each \$1.20 Mfrs. List Each \$0.50











W. E. List Each \$1.44 Mfrs. List Each \$0.60

W. E. List Each \$3.60 Mfrs. List Each \$1.50

W. E. List Each \$1.56 Mfrs. List Each \$0.65

W. E. List Each \$1.20 Mfrs. List Each \$0.50

W. E. List Each \$1.20 Mfrs. List Each \$0.50











W. E. List Each \$1.20 Mfrs. List Each \$0.50

W. E. List Each \$1.44 Mfrs. List Each \$0.60

W. E. List Each \$1.61 Mfrs. List Each \$0.70

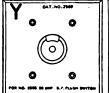
W. E. List Each \$7.20 Mfrs. List Each \$3.00

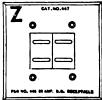
W. E. List Each \$1.44 Mfrs. List Each \$0.60











W. E. List Each \$1.56 Mfrs. List Each \$0.65

Wiring Devices

W. E. List Each \$1.20 Mfrs. List Each \$0.50

W. E. List Each \$3.84 W. E. List Each \$3.60 W. E. List Each \$4.80 Mfrs. List Each \$1.60 Mfrs. List Each \$1.50 Mfrs. List Each \$2.00

## PERKINS SNAP SWITCHES

125-250 Volts







No. 2002

No. 2001

#### SMALL SIZE, SINGLE POLE

5 Amperes, 125 Volts; 3 Amperes, 250 Volts

Schedule "H"

List No.	Description	Diam. of Base	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mírs. List Each	W. E. List Each
20004	Slotted	2 ins.	13% ins.	10	250	75	\$0.28	\$0.68
2220▲	Solid	2 ins.	13% ins.	10	250	75	.28	. <b>6</b> 8
2047▲	Slotted, indicating	2 ins.	13% ins.	10	250	75	.32	.78
2035▲	Solid, indicating	2 ins.	$1\frac{3}{8}$ ins.	10	250	75	.32	.78

#### LARGE SIZE, SINGLE POLE

5 Amperes, 125 Volts; 3 Amperes, 250 Volts

Schedule "H"

2170 <sup>4</sup> 2002 <sup>4</sup> 2254 <sup>4</sup> 2255 <sup>4</sup>	Solid	21/4 ins. 21/4 ins.	1½ ins. 1½ ins.	10 10	100 100 100 100	30 30 30 30	\$0.36 .36 .40 .40	\$0.86 .86 .96
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#### SINGLE POLE

10 Amperes, 125 Volts; 5 Amperes, 250 Volts

Schedule "H"

2001 <sup>4</sup> 2221 <sup>4</sup> 2048 <sup>4</sup>	Slotted	$12\frac{7}{4}$ ins.	1 23 ins.	10	100 100 100	45 45	\$0.48 .48 .51	1.16 1.30
2036	Solid, indicating	$2\frac{7}{16}$ ins.	1 📆 ins.	10	100	45	.51	1.30







No. 2175



No. 2176

#### THREE POINT SWITCHES

Schedule "H"

List No.	Description	Diam. of Base	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mírs. List Each	W. E. List Each
*2455* *2456* †2175* †2027*	Solid, 3 amperes	2 ins. 2 ins. 2¼ ins. 2¼ ins.	13/8 ins. 13/8 ins. 11/2 ins. 11/2 ins.	10 10 10 10	100 100 100 100	25 25 25 25 25	\$0.48 .48 .56	\$1.16 1.16 1.34 1.34
12176▲ 12030▲	Solid, 10 amperes	$2\frac{7}{16}$ ins. $2\frac{7}{16}$ ins.	$1\frac{23}{32}$ ins. $1\frac{23}{32}$ ins.	10 10	50 50	25 25	.76 .76	1.82

Any of the above switches can be converted into a lock switch by removing the handle and substituting Universal Lock Attachment. Digitized by GOOGLE

<sup>\*</sup> Rated at this capacity for 125 volts.
† Rated at this capacity for 125 volts.
‡ Rated at this capacity for 125 volts. 250-volt capacity 1 ampere. 250-volt capacity 3 amperes. 250-volt capacity 5 amperes.

<sup>\*</sup>National Electrical Code Standard.

## PERKINS SNAP SWITCHES











No. 2183

No. 2216 No. 2185

No. 2391

No. 2009 Schedule "H"

FOUR POINT-5 Amperes, 125 Volts; 2 Amperes, 250 Volts Four-point Switches are used in connection with two Three-point Switches where current is to be controlled from any one of more than two points. A Four-point Switch is installed between the Three-point Switches at each additional point.

Four-point Switches can also be used individually as Pole-changing Switches.

List No.	Description	Diam. of Base	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
2183	Solid	$2\frac{7}{16}$ ins.	$1\frac{23}{32}$ ins.	10	30	15	\$0.86	\$2.05
2033	Slotted	$2\frac{7}{16}$ ins.	$1\frac{23}{32}$ ins.	10	30	15	.86	2.06
2-CIRCUIT ELECTROLIER Sch								le "H"
2216▲	Solid (1-2-1 and 2-off)	$ 2\frac{7}{16}$ ins.	$1\frac{23}{32}$ ins.	10	30	15	\$0.76	\$1.82
2215	Slotted (1-2-1 and 2-off)	$2\frac{7}{16}$ ins.	$1\frac{23}{32}$ ins.	10	30	15	.76	1.82
2188	Solid, indicating (1-2-1 and 2-off).	$2\frac{7}{16}$ ins.	$1\frac{23}{32}$ ins.	10	30	15	.83	2.06
2074	Slotted, indicating (1-2-1 and 2-off).	$2\frac{7}{16}$ ins.	$1\frac{23}{32}$ ins.	10	30	15	.86	2.06
2649	Solid (1-1 and 2-1-off)	$2\frac{7}{6}$ ins.	$1\frac{23}{32}$ ins.	10	30	15	.90	2.16
2650	Slotted (1-1 and 2-1-off)	$2\frac{7}{6}$ ins.	$1\frac{23}{32}$ ins.	10	30	15	.90	2.16
2651	Solid, indicating (1-1 and 2-1-off)	$2\frac{7}{6}$ ins.	$1\frac{23}{32}$ ins.	10	30	15	1.00	2.40
2652	Slotted, indicating (1-1 and 2-1-off).	$2^{\frac{7}{6}}$ ins.	$1\frac{23}{32}$ ins.	10	30	15	1.00	2.40
2653	Solid (1-off-2-off)	$2\frac{7}{16}$ ins.	$1\frac{23}{32}$ ins.	10	30	15	.90	2.16
2654	Slotted (1-off-2-off)	$2\frac{7}{16}$ ins.	$1\frac{23}{32}$ ins.	10	30	15	.90	2.16
2655	Solid, indicating (1-off-2-off)	$2\frac{7}{16}$ ins.	$1\frac{23}{32}$ ins.	10	30	15	1.00	2.40
2656	Slotted, indicating (1-off-2-off)	$2\frac{7}{16}$ ins.	1 23 ins.	10	30	15	1.00	2.40
2657	Solid (1-off-1 and 2-off)	$2\frac{7}{16}$ ins.	$1\frac{23}{32}$ ins.	10	30	15	.90	2.16
2658	Slotted (1-off-1 and 2-off)	$2\frac{7}{16}$ ins.	$1\frac{23}{32}$ ins.	10	30	15	.90	2.16
2659	Solid, indicating (1-off-1 and 2-off).	$2\frac{7}{16}$ ins.	$1\frac{23}{32}$ ins.	10	30	15	1.00	2.40
2660	Slotted, indicating (1-off-1 and 2-off)	$2\frac{7}{16}$ ins.	$1\frac{23}{32}$ ins.	10	30	15	1.00	2.40
2661	Solid (1-1 and 2-off)	21/4 ins.	$1\frac{23}{32}$ ins.	10	30	15	.90	2.16
2662	Solid, indicating (1-1 and 2-off)	21/4 ins.	$1\frac{23}{33}$ ins.	10	30	15	1.00	2.40
2663	Solid, electrolier or 2-speed fan motor	21/4 ins.	134 ins.	10	30	15	.90	2.16
2485	Solid, indicating, electrolier or 2-speed				1.0	What I	Cole Talk	And Comment
	fan motor	21/4 ins.	13/4 ins.	10	30	15	1.00	2.40

The above switches operate as follows: 1st turn connects Circuit One alone. 2d turn connects Circuit alone. 3d turn connects Circuits One and Two. 4th turn off.

I WO SIG		Schedul	e "H"					
2185 <sup>4</sup> 2070 <sup>4</sup> 2187 <sup>4</sup> 2072 <sup>4</sup>	Solid (1-1 and 2-1 and 2 and 3-off). SlottedSolid, indicatingSlotted, indicating	$\begin{array}{c} 2\frac{7}{16} \text{ ins.} \\ 2\frac{7}{16} \text{ ins.} \\ 2\frac{7}{16} \text{ ins.} \\ 2\frac{7}{16} \text{ ins.} \end{array}$	133 ins. 133 ins. 133 ins. 133 ins.	10 10 10 10	30 30 30 30	15 15 15 15	\$0.90 .90 1.00 1.00	\$2.16 2.16 2.40 2.40
	3-CIRCUIT ELECTROLIER OR 3 SPEED FAN MOTOR							

2664	Solid (1-2-3-off)	$12\frac{7}{16}$ ins.	1 <del>3                                  </del>	10	30	15	<b>\$</b> 0.90	\$2.16
2665	Slotted (1-2-3-off)	$2\frac{7}{16}$ ins.	1 👬 ins.	10	30	15	.90	2.16
2666	Solid, indicating (1-2-3-off)	$2\frac{7}{16}$ ins.		10	30	15	1.00	2.40
2667	Slotted, indicating (1-2-3-off)	$2\frac{1}{16}$ ins.	1 33 ins.	10	30	15	1.00	2.40
- 671				_	31.		- 0:	

The above switches operate as follows: 1st turn connects Circuit One. 2d turn connects Circuits One and Two. 3d turn connects Circuits One, Two and Three. 4th turn off.

DOUBLE POLE, 250 VOLTS								e "H"
List No.	Description	Diam. of Base	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
2391 <sup>4</sup> 2392 <sup>4</sup>	Solid, 5 amperes	2 ins. 2 ins.	13/8 ins. 13/8 ins.	10	100 100	30 30	\$0.56 .56	\$1.04
2393*	Solid, indicating, 5 amperes	2 ins.	13/8 ins.	10	100	30 30	.64	1.54
2394 <sup>4</sup> 2009 <sup>4</sup>	Slotted, indicating, 5 amperes Solid, 10 amperes	2 ins. 2 1 ins.	13/8 ins. 13/3 ins.	10 10	100 100	45	.64 .66	1.60
2017 <sup>4</sup> 2038 <sup>4</sup>	Solid, indicating, 10 amperes	$2\frac{7}{16}$ ins. $2\frac{7}{16}$ ins.	1 23 ins. 1 23 ins.	10 10	100 100	45 45	.66	1.60 1.82
20504	Slotted, indicating, 10 amperes	$2\frac{7}{16}$ ins.	1 ## ins.	10	100	45	.76	1 82

Any switch on this page can be converted into a Lock Switch by removing the handle and substituting Universal Lock Attachment. \*National Electrical Code Standard.

#### PERKINS SNAP SWITCHES

125-250 Volts









No. 2011

No. 2611

No. 2025

No. 2597

# DOUBLE POLE

20	Amperes,	<b>250</b>	Volts

List No.	Description	Diam. of Base	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
2011 <sup>4</sup> 2019 <sup>4</sup> 2040 <sup>4</sup> 2052 <sup>4</sup>	SolidSlottedSolid, indicatingSolited, indicatingSolited, indicatingSlotted, indicatingSlotted	3 ins. 3 ins. 3 ins. 3 ins.	$\begin{array}{c} 2\frac{3}{16} \text{ ins.} \\ 2\frac{3}{16} \text{ ins.} \\ 2\frac{3}{16} \text{ ins.} \\ 2\frac{3}{16} \text{ ins.} \\ 2\frac{3}{16} \text{ ins.} \end{array}$	10 10 10 10	30 30 30 30	25 25 25 25 25	\$1.40 1.40 1.50 1.50	\$3.36 3.36 3.60 3.60

#### **DOUBLE POLE**

30	Amperes,	250	Volts	

#### Schedule "H"

2042	Solid Slotted Solid, indicating	$3\frac{2}{16}$ ins. $3\frac{2}{16}$ ins.	$2\frac{9}{16}$ ins. $2\frac{9}{16}$ ins.	1 1 1	30 30 30	30 30 30	\$1.70 1.70 1.80	\$4.08 4.08 4.32
2054	Slotted, indicating	$3\frac{9}{16}$ ins.	$2\frac{9}{16}$ ins.	1	30	30	1.80	4.32

#### **DOUBLE POLE**

#### 50 Amperes, 250 Volts

#### Schedule "H"

List No.	Description	Diam. of Base	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
2015	Solid	4½ ins.	3 11 ins.	1	10	15	<b>\$</b> 3.00	\$7.20
2023	Slotted	$4\frac{1}{2}$ ins.	$3\frac{11}{12}$ ins.	1	10	15	3.00	7.20
2044	Solid, indicating	$4\frac{1}{2}$ ins.	3 🙀 ins.	1	10	15	3.10	7.44
2056	Slotted, indicating	$4\frac{1}{2}$ ins.	3 <del>11</del> ins.	1	10	15	3.10	7.44

## DOUBLE POLE. DOUBLE THROW

10 Amperes,	250 Volts	Schedule	"H"

2611	Solid	2   ins.	2 1 ins.	·	10	1 1	\$2.40	\$5.76
	Slotted		$2\frac{1}{16}$ ins.		10		2.40	5.76
2613	Solid, indicating		$ 2\frac{1}{16}$ ins.		10		2.50	6.00
2614	Slotted, indicating	$12\frac{11}{18}$ ins.	$2\frac{1}{16}$ ins.		10	<u> </u>	2.50	6.00

#### TRIPLE POLE

#### 10 Amperes, 250 Volts

#### Schedule "H"

2025	Solid	$2\frac{1}{16}$ ins.	$2\frac{1}{16}$ ins.	10	10	12	\$1.90	\$4.56
2633	Slotted	$2\frac{1}{16}$ ins.	$2\frac{1}{16}$ ins.		10		1.90	4 56
2046	Solid, indicating	$2\frac{1}{16}$ ins.	$2\frac{1}{16}$ ins.	10	10	12	2.00	4.80
2634	Slotted, indicating	$2\frac{1}{16}$ ins.	$2\frac{1}{16}$ ins.		10	١	2.00	4.80

Any switch on this page can be converted into a lock switch by removing the handle and substituting Universal Lock Attachment.

#### TRIPLE POLE

20 Amperes, 250 Volts

Schedule "H"

\*\*2597 | Switch with cast iron cover..... | ...... | 1 | 10 | .. | \$4.00 | \$9.60

\*This switch is designed for use in controlling 3 phase alternating current motors up to and including 2 H.P. either 250 or 600 volts.

A National Electrical Code Standard. Digitized by GOOGLE

# PERKINS SWITCH ACCESSORIES





No. 2126

#### Miscellaneous Parts

#### Switch Handles and Lock Attachment

Schedule "H"

List No.	Description	Carton   Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
501399	Rotary Switch Handles, composition or porcelain		100		\$0.06	
501400	Rotary Switch Handles, metal	100	100		.12	.30
	furnished without handles					
501401	Switches with metal handles, add				.06	. 15
2384	Universal Lock Attachment	100	100	4	. 16	. 39

By substituting this lock attachment for the regular handle on any Perk as Rotary Switch, either surface or flush, lock switches may be obtained. With this lock attachment, special plates are no longer required for Lock Flush Switches.

	Keys for Lock Switches		Scl	hedule ''H''	
2126 <sup>*</sup> 2299	Key for Rotary Lock Switches	100 100	100 100	$\frac{2}{2}$	\$0.06 15 .36





# Porcelain Switch Blocks

For Wall Sockets, Receptacles and 5 Ampere 250 Volt Switches Schedule "H"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
2381	For surface work	10	100	30	\$0.05	<b>30</b> .12
2382	For concealed work	10	100	28	.05	.12
2383	For molding work	10	100	25	. 05	.12
2439	For molding terminal	10	100	30	.05	.12

	For 10 Ampere 250 Volt and 5 Ampere 600				Schedu	le "H"
2357 <sup>*</sup> 2252 <sup>*</sup> 2222 <sup>*</sup> 2358 <sup>*</sup>	For surface work For concealed work For molding work For molding terminal	10 10 10 10	100 100 100 100	45 40 40 45	\$0.06 .06 .06 .06	.15

## For 20 and 30 Ampere 250 Volt and 10 and 20 Ampere 600 Volt Switches

					Schedu	le "H"
2380°   For con-	ace work	5	25 25 25 25	22 24 24	\$0.15 .15 .15	\$0.36 .36

#### Switch Covers

Schedule "H"

List No.	Description	Std. Pkg.	Mfrs. List Each	W. E. List Each
501417	Cover for 10 ampere, 250 volt Double Pole Switch, and any other cover not larger		\$0.08	\$0.20
501418	Allowance \$0.08 (Mfrs. List \$0.03) when switch es are furnished without covers.  All larger covers.  Allowance \$0.20 (Mfrs. List \$0.08) when switches are furnished without covers.	<b>50</b>	.20	.48
_ ∧ N	ational Electrical Code Standard.	1816		

51

<sup>▲</sup> National Electrical Code Standard.

## PERKINS SWITCHES

125-250 Volts





No. 2454

# "Straight-through" Switches

6 Amperes, 125 Volts; 3 Amperes, 250 Volts

Schedule "H"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
2592	Single Pole	10	50	13	\$0.60	\$1.44
	10 Amperes, 250 Volts				Schedu	le "H"
2454 <sup>4</sup> 2490 <sup>4</sup>	Double Pole. Double Pole, indicating.	1 1	25 25	10 10	\$2.60 1.30	\$2.88 3.12
Oper	SERIES MULTIPLE HEAT REGULATION ating high, medium low, off. 5 amperes, 125 volts; 2 amp					
2678	Three Heat Switch, indicating, Single Pole	10 ·	10	12	\$1.30	\$3.12





No. 2370

# Type "T" Pendent Switches SINGLE POLE

6 Amperes, 125 Volts; 3 Amperes, 250 Volts

Schedule "H"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
2572 <sup>4</sup> 2573 <sup>4</sup> 2574 <sup>4</sup> 2370 <sup>4</sup> 2250 <sup>4</sup> 2270 <sup>4</sup>	Pendent Cap, horizontal buttons  ½ inch cap, horizontal buttons  k inch cap, horizontal buttons.  Pendent Cap, vertical buttons.  inch cap, vertical button  inch cap, vertical button.	10 10 10 10	100 100 100 100 100 100	30 30 30 30 30 30	\$0.50 .50 .60 .50 .50	\$1.20 1.20 1.44 1.20 1.20
	10 Amperes, 125 Volts; 5 Amperes,	250 Vol	ts		Schedul	le "H"

Pendent Cap, vertical button..... 23594 \$1.92 100 \$0.80 45 2353\* 10 100 45 .80 1.92 2354 100 2.16

Note: The standard finish on the above switches is brush brass, which will be supplied on all orders where no finish is specified. Switches will be finished in polished brass, when specified, at the same price. For switches in any other finish, add \$0.24 to list price. Mfrs. List \$0.10. Digitized by Anational Electrical Code Standard.

# PERKINS PULL SWITCHES

### Ceiling Pull Switches

Schedule "H"



List		Am	peres	۱	Cr.1	Pkg.	Mfrs.	W. E.
No.	Description	125 Volts	250 Volts	Carton Quantity	Std. Pkg.	W	List Each	List Each
2387	Single Pole, solid	10	5	10	30	20	\$1.00	\$2.40
2309	Single Pole, slotted		5	10	30	20	1.00	2.40
2388	Three-Point, solid	10	5	10	10	8	1.18	2.84
2310	Three-Point, slotted	10	5	10	10	8	1.18	2.84
2389	Four-Point, solid	5	2	1	5	4	1.18	2.84
2311	Four-Point, slotted	5	2	1	5	4	1.18	2.84
*2390*	Electrolier, 2-circuit, solid	10	5	1	5	4	1.18	2.84
*2312*	Electrolier, 2-circuit, slotted.	10	5	1	5	4	1.18	2.84
*2395*	Electrolier, 3-circuit, solid	10	5	1	5	4	1.18	2.84
*2313*	Electrolier, 3-circuit, slotted	- 10	5	1	5	4	1.18	2.84
2396	Double Pole, solid	10	10	10	10	8	1.18	2.84
2314	Double Pole, slotted	10	10	10	10	8	1.18	2.84

Outside diameter of base is  $2\frac{7}{16}$  inches. Holes for supporting screws are spaced 133 inches on centers.



No. 2546

# Wall Pull Switches

Schedule "H"

2546 Single Pole, solid	10	5 i	10	1 30	20	\$1.00 \$2.40
2547 Single Pole, slotted	10	5	îŏ	30	20	1.00 2.40
2548 Three-Point, solid	10	5	10	10	8	1.18 2.84
2549 Three-Point, slotted	10	5	10	10	8	1.18 2.84
2550 Four-Point, solid	5	2	1	5	4	1.18 2.84
2560 Four-Point, slotted	5	2	1	5	4	1.18 2.84
*2561 Electrolier, 2-circuit, solid .	10	5	1	5	4	1.18 2.84
*2562* Electrolier, 2-circuit, slotted	10	5	1	5	4	1.18 2.84
*2563 Electrolier, 3-circuit, solid.	10	5	1	5	4	1.18 2.84
*2564* Electrolier, 3-circuit, slotted	10	5	1	5	4	1.18 2.84
2565⁴Double Pole, solid	10	10	10	10	8	1.18 2.84
2566 Double Pole, slotted	10	10	10	1 10	8	1.18 2.84

Outside diameter of base is 27 inches. Holes for supporting screws are spaced 133 inches on centers.



No. 2473

# Type "O" Pull Switches

With 1/8 Inch Cap 

Schedule "H"

With 3	S	chedule "H"				
2473* Single Pole	10	5 1	10	30	12	j \$1.30  <b>\$3.12</b>
2474 Three-Point	10	5	10	10	4	1.30 3.12
2475 Four-Point	5	2	10	10	4	1.30 3.12
*2476*2-Circuit Electrolier	5	2	10	10	4	1.30 3.12
*2477 3-Circuit Electrolier	5	2	10	10	4	1.30 3.12
2478 Double Pole	10	10	10	10	4	1.30 3.12
2479 2-Speed Fan Motor	10	5	10	10	4	1.30 3.12
2480 A 3-Speed Fan Motor	10	5	10	10	4	1.30 3.12

Garage III
TO TAKE
1 10 15
+
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No 2507 Wiring Devices

With	With Hickey Cap						Schedule "H"					
2507* Single Pole	10	5	10	30	14	\$.130 \$	3.12					
2508 Three-Point	10	5	10	10	5	1.30	3.12					
2509 Four-Point	5	2 ]	10	10	5	1.30	3.12					
*2510*2-Circuit Electrolier	5	2	10	10	5	1.30	3.12					
*2511*3-Circuit Electrolier	5	2	10	10	5	1.30	3.12					
2512 Double Pole		10	10	10	5	1.30	3.12					
2513 2-Speed Fan Motor	10	5	10	10	5	1.30	3.12					
2514*3-Speed Fan Motor		5	10	10	5	1.30	3.12					

Note: The above switches are supplied with 10 feet of best quality linen cord. Extra cord, \$0.03 list per foot, Mfrs. List \$0.01

\*Details of operation of switches given previously

\*National Electrical Code Standard.

# **PERKINS SWITCHES** 600 Volts



No. 2171



No. 2049



No. 2060

#### 3 AMPERES, SINGLE POLE

#### Schedule "H"

List No.	Description	Diam. of Base	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs <sup>.</sup> List Each	W. E. List Each
2171 <sup>4</sup> 2003 <sup>4</sup> 2226 <sup>4</sup> 2225 <sup>4</sup>	Solid Slotted Solid, indicating Slotted, indicating	2½ ins. 2¼ ins. 2¼ ins. 2¼ ins. 2¼ ins.	1½ ins. 1½ ins. 1½ ins. 1½ ins. 1½ ins.	10 10 10 10	50 50 50 50	25 25 25 25 25	\$0.54 .54 .60 .60	\$1.30 1.30 1.44 1.44

#### 5 AMPERES, SINGLE POLE

### Schedule "H"

2211 <sup>A</sup>   Solid	$2\frac{7}{16}$ ins. $2\frac{7}{16}$ ins. $2\frac{7}{16}$ ins. $2\frac{7}{16}$ ins. $2\frac{7}{16}$ ins.	133 ins. 133 ins. 133 ins. 133 ins.	10 10 10 10	50 50 50 50 50	25 25 25 25 25	\$0.66 .66 .76 .76	1.60 1.82
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#### 10 AMPERES, SINGLE POLE

#### Schedule "H"

2228 <sup>4</sup> 2060 <sup>4</sup>	Solid	3	ins. ins.	$2\frac{3}{16}$ ins. $2\frac{3}{16}$ ins.	10 10	50 50	45 45	1.60 1.70	3.84 4.08
	!						<u> </u>	<u> </u>	



No. 2301



No. 2448

#### 20 AMPERES, SINGLE POLE

#### Schedule "H"

List No.	Description	Diam. of Base	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
23014	Solid	3 ins.	$2\frac{9}{16}$ ins.	1	50	70	\$1.90	\$4.56
2302	Slotted	3 ins.	2 ins.	1	50	70	1.90	4.56
2303	Solid, indicating	$3\frac{3}{16}$ ins.	$2\frac{5}{16}$ ins.	1	50	70	2.00	4.80
2304	Slotted, indicating	$3\frac{3}{16}$ ins.	$2\frac{10}{16}$ ins.	1	50	70	2.00	4.80
		·						

# 10 AMPERES, DOUBLE POLE

# Schedule "H"

2445 <sup>4</sup> 2446 <sup>4</sup> 2447 <sup>4</sup> 2448 <sup>4</sup>	Solid Slotted Solid, indicating Slotted, indicating Slotted, indicating Slotted, indicating	3	ins. ins.	$2\frac{3}{16}$ ins. $2\frac{3}{16}$ ins. $2\frac{3}{16}$ ins. $2\frac{3}{16}$ ins.	10 10	50 50 50 50 50	45 45 45 45	\$1.80 1.80 1.90 1.90	\$4.32 4.32 4.56 4.56
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Any Switch on this page can be converted into a lock switch by removing the handle and substituting Universal Lock Attachment.

A National Electrical Code Standard.

# PERKINS SWITCHES 600 Volts







No. 2100

3 AMPERES, THREE-POINT

Schedule "H"

List No.	Description	Diam. of Base	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
2232 <sup>*</sup> 2231 <sup>*</sup>	Solid. Slotted.	2½ ins. 2¼ ins.	$\frac{1\frac{1}{2} \text{ ins.}}{1\frac{1}{2} \text{ ins.}}$	10 10	50 50	25 25	\$0.70 .70	\$1.68 1.68
	5 AMPER	RES, THE	REE-POIN	IT '			Schedu	le "H"
2179 <sup>4</sup> 2100 <sup>4</sup> *2413 <sup>4</sup> *2414 <sup>4</sup>	Solid   Slotted   Indicating, solid   Indicating, slotted	$2\frac{7}{16}$ ins. $2\frac{7}{16}$ ins.	1 33 ins. 1 33 ins. 1 33 ins. 1 33 ins. 1 33 ins.	10 10 10 10	50 50 50 50 50	25 25 25 25 25	\$0.90 .90 1.00 1.00	\$2.16 2.16 2.40 2.40
	. 10 AMPEI	RES, TH	REE-POI	TV			Schedu	e "H"
2397 <sup>4</sup> 2398 <sup>4</sup> *2415 <sup>4</sup> *2416 <sup>4</sup>	Solid	3 ins.	$\begin{array}{c} 2\frac{3}{16} \text{ ins.} \\ 2\frac{3}{16} \text{ ins.} \\ 2\frac{3}{16} \text{ ins.} \\ 2\frac{3}{16} \text{ ins.} \\ 2\frac{3}{16} \text{ ins.} \end{array}$	10 10 10 10	50 50 50 50	45 45 45 45	\$1.70 1.70 1.80 1.80	\$4.08 4.08 4.32 4.32

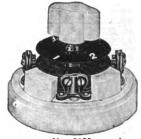
<sup>\*</sup> These Switches indicate "on" and "off."







No. 2409



No. 2079

	†3 AMP	ERES, 2	-CIRCUIT				Schedu	le "H"
List No.	Description	Diam. of Base	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
2181	Solid	$2\frac{7}{16}$ ins.	$1\frac{23}{32}$ ins.	10	50	25	\$0.76	\$1.82
2028	Slotted	$2\frac{7}{16}$ ins.	$1\frac{23}{32}$ ins.	10	50	25	.76	1.82
2062	Indicating, solid	$2\frac{7}{16}$ ins.	$1\frac{23}{32}$ ins.	10	50	25	.86	2.06
2068▲	Indicating, slotted	$2\frac{7}{16}$ ins.	$1\frac{23}{32}$ ins.	10	50	25	.86	2.06
1	†10 AMF	PERES, 2	-CIRCUI	Т			Schedu	le "H"
2409	Solid	3 ins.	$2\frac{3}{16}$ ins.	10	50	45	\$1.70	\$4.08
2410	Slotted	3 ins.	$2\frac{3}{16}$ ins.	10	50	45	1.70	4.08
2411	Indicating, solid	3 ins.	$2\frac{3}{16}$ ins.	10	50	45	1.80	4.32
2412	Indicating, slotted	3 ins.	$2\frac{3}{16}$ ins.	10	50	45	1.80	4.32
	††15 AMPERE	S, HEAT	REGUL	ATING			Schedu	e "H"
2079*	Solid, indicating, 3-heat	3 % ins.	$2\frac{9}{16}$ ins.	1	10	30	\$3.10	\$7.44
2081	Solid, indicating, 2-heat	$3\frac{9}{16}$ ins.	$2\frac{9}{16}$ ins.	1	10	30	3.10	7.44

†These Switches will break the circuit without the use of an additional switch, and are especially adapted for use on street cars as headlight switches and to control the interior lights.

††These Switches are used for the regulation of heat by different combinations of the heaters.

Any Switch on this page can be converted into a lock switch by removing the handle and substituting

Universal Lock Attachment.

A National Electrical Code Standard.

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# PERKINS SWITCHES

#### 600 Volts



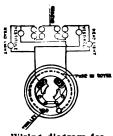




No. 2077



Wiring diagram for Nos. 2077 and 2277



Wiring diagram for Nos. 2078 and 2278

# Porcelain Cap Switches

Schedule "S"

List No.	Description	Diam. of Base	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
2265 <sup>a</sup> 2449 <sup>a</sup> 2267 <sup>a</sup> 2450 <sup>a</sup> 2268 <sup>a</sup> 2451 <sup>a</sup> 2272 <sup>a</sup> 2452 <sup>a</sup> 2453 <sup>a</sup>	3 ampere single pole 3 ampere single pole indicating 5 ampere single pole 5 ampere, single pole indicating 3 ampere, three-point 3 ampere, three-point, indicating 5 ampere, three-point 5 ampere, three-point, indicating 3 ampere, 2-circuit. 3 ampere, 2-circuit, indicating	2½ ins. 2½ ins.	1 12 ins. 1 12 ins. 1 12 ins. 1 12 ins. 1 13 ins. 1 14 ins. 1 14 ins. 1 14 ins. 1 14 ins. 1 14 ins. 1 14 ins. 1 14 ins. 1 14 ins. 1 14 ins. 1 14 ins.	10 10 10 10 10 10 10 10 10	10 10 10 10 10 10 10 10 10 10	9 9 9 9 9 9 9	\$0.72 .82 .82 .92 .82 .92 1.06 1.16 .92 1.02	1 .97 1 .97 2 .21 1 .97 2 .21 2 .54 2 .78 2 .21

The above switches cannot be supplied on slotted bases.

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Schedule "S"

Schedule "S"

2077 2277	3 ampere, S. P., indicating	3½ ins.	1 13 ins.	1	10	15	\$1.60	\$3.84
	porcelain	$3\frac{1}{2}$ ins.	1 1 ins.	1	10		1.60	
$\frac{2078}{2278}$	3 ampere, 2-circuit	$3\frac{1}{2}$ ins. $3\frac{1}{2}$ ins.	1 1 ins.   1 ins.	1	10 10	15 15	1.60	3.84 3.84

The above switches cannot be supplied on solid bases.

# Brown Porcelain Cap and Base





List No.	Description	Carton Quantity	Std. Pkg.	I'kg. Wt. Lbs	Mfrs. List Each	W. E. List Each
2315 <sup>4</sup> 2404 <sup>4</sup> 2405 <sup>4</sup>	3 ampere, single pole, indicating 3 ampere, 3-point, indicating 3 ampere, 2-circuit, indicating .	1 1 1	25 25 25	18 18 18	\$1.50 1.50 1.50	

Connections for Enclosed Fuses

	Enclosed Fuse		Schedule "E"
2316 3 ampere enclosed long, ½ inch dia	fuse 3 1 ins. meter 25	100	7 \$0.30 \$0.72

The above switch prices do not include fuses. One fuse will be furnished with each switch, however, unless otherwise specified, and charge made for it at the regular price.

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A National Electrical Code Standard.

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# 'QUICK CATCH" SOCKETS AND PULL SWITCHES

- 40	1011	111 011		LLIU	AIID I	OLL .	J WII C	
National Electrical Code Standard Pull and Key Sockets 250 Watts, 250 Volts		4						
Keyless Sockets 660 Watts, 250 Volts. All Pull Switches	1/4-inch	K -inch	¼-inch	Pendent	1/4-inch Male	¼-inch Male	⅓-inch Male	%-inch Angle
3 Amperes, 125 Volta 1 Ampere, 250 Volts	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25
No. 60 Pull Socket	No. 3618	No. 3769	No. 3619	No. 3620	No. 3775	No. 3776	No. 3777	No. 3757
Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25
No. 61	No. 3664	No. 3770	No. 3665	No. 3666	No. 3682	No. 3778	No. 3780	No. 3758
Key Socket								
Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25
No 62	No. 3667	No. 3771	No. 3668	No. 3669	No. 3781	No. 3779	No. 3683	No. 3759
Keyless Socket								
Carton 25	Carton 65	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25
No. 63	No. 5702	No. 5724	No. 5703	No. 5704	No. 5891	No. 5892	No. 5893	No. 6340
Ceiling Switch	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10
No. 64	No. 6300	No. 6301	No. 6302	No. 6427	No. 6303	No. 6304	No. 6305	No. 6403
Fixture Switch	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10
No. 65	No. 6361	No. 6362	No. 6363	No. 6364	No. 6365	No. 6366	No. 3367	No. 6368
Rosette Switch				0				
Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10
No. 66 Wall Switch	No. 6376	No. 6377	No. 6378	No. 6379	No. 6380	No. 6381	No. 6382	No. 6383
Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10
- 1 - 1	Mfra IW F II	1 1	1 1Mfm	M E I		IME DA E I		1 11/6-1

List No.	Sched- ule		Std.	Mfrs. List Each	List	List	Sched- ule	Car- ton	Std. Pkg.	Mfrs. List Each	List	List	Sched- ule	Car- ton	Std. Pkg.	List	W.E. List Each	List	Sched- ule	Car- ton	Std. Pkg.	Mfrs. List Each	List
60 61 62 63 64 65 66 3619 3620 3664 3665 3667 3668 3669 3682 3683 3757	F F B B B B B B B B B B B B B B B B B B	25 25 25 10 10 10 10 25 25 25 25 25 25 25 25 25 25 25 25	250 500 500 500 500 500 250 250 2500 2500 500	\$0.53 .26 .23 .53 .68 .53 .60 .66 .60 .33 .39 .30 .30 .30 .30 .30 .30 .30 .30 .30 .30	.62 .55 1 27 1 63 1 27 1 27 1 44 1 .58 1 44 .79 .94 .79 .72 .86 .72 .79	3759 3769 3770 3771 3775 3776 3777 3778 3779 3780 3781 5702	BBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB	25 25 25 25 25 25 25 25 25 25 25 25 25 2	100 100 250 250 250 100 250 250 250 250 500 500 250 250	\$0.38\$ .35 .69 .42 .39 .60 .69 .42 .39 .42 .30 .60 .07 .16 .13	84 1 66 1 01 94 1 44 1 66 1 66 1 01 94 1 01 72 1 44 17 38	5703 5704 5724 5891 5892 5893 6300 6301 6302 6303 6304 6305 6340 6361 6362 6363	FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF	10 10 10 10 10 10 10 10 10 10 10 10 10 1	20 20 20 20 20 20 20 20 20 20 20 20 20 2	\$0.66 .60 .69 .69 .69 .75 .84 .81 .75 .84 .65 .60	1 .44 1 .66 1 .44 1 .66 1 .66 1 .80 2 .02 1 .94 1 .80 2 .02 2 .02 2 .02 1 .56 1 .44	6368 6376 6377 6378 6379	444444444444444444444444444444444444444	10 10 10 10 10 10 10 10 10 10 10 10 10 1	20 20 20 20 20 20 20 20 20 20 20 20 20 2	\$0.60 .69 .69 .65 .60 .69 .66 .69 .65 .80	1 .66 1 .56 1 .44 1 .66 1 .58 1 .44 1 .66 1 .66 1 .66 1 .56

Standard finishes are brush brass and polished brass. Brush brass shipped ubless otherwise specified. Quick Catch" devices supplied with threaded shells. For special finishes see listing elsewhere. For prices of socket parts see listing elsewhere. Sockets furnished with chains over 8 inches length, except ceiling and rosette, add to list, \$0.24 per foot; Mîrs. List, \$0.10. For listing of special cause and brase account of special countries.

# "QUICK CATCH" SOCKETS AND PULL SWITCHES

		8	3				FORER
X-inch Angle	1/4-inch Angle	14-inch Fixture	%-inch Fixture	1/4-inch Angle Fixture	%-inch Angle Fixture	Small Concealed Base	Small Concealed Covered Base
Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 10	Carton 10
No. 3760	No. 3763	No 3345	No. 3346	No. 3351	No. 3352	No. 3731	No. 3734
图							
Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 10	Carton 10
No. 3761	No. 3764	No. 3347	No. 3348	No. 3353	No. 3354	No. 3732	No. 3735
Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 10	Carton 10
No. 3762	No. 3765	No. 3349	No 3350	No. 3355	No 3356	No. 3733	No. 3736
B							T
Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 10	Carton 10
No. 6341	No. 6342	No. 6343	No. 6344	No. 6345	No 6346	No. 5795	No. 5796
Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10
No. 6404	No. 6405	No. 6413	No. 6414	No. 6415	No. 6416	No. 6417	No. 6418
Carton 10	The state of the s		•				T
No. 6369	No. 6370	No. 6371	No. 6372	No. 6373	No. 6374	No. 5900	No. 5901
	D.	10.65/1	No. 65/2	10.63	<b>D</b>	18. 3900	10. 5901
Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10
No. 6384	No. 6385	No. 6386	No. 6387	No. 6388	No. 6389	No. 6096	No. 6097
B							H
Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10.	Çarton 10

Patent Allowed

				Mfrs.	W. E. List					Mfrs	W.E.					Mfrs.	W.E.					Mfrs.	W.E.
List	Sched-	Car- ton	Std. Pkg.	List	Price Each	List No.	Sched- ule	Car-	Std. Pkg.	List Each			Sched- ule	Car- ton	Std. Pkg.	List	Price Each	List No.	Sched- ule	Car	Std. Pkg.	List Each	Price Each
No. 3345	ule B	25	_	\$0.66	\$1.58	3733	В	10	250		\$0.98	6096	F	10	20	\$0.71	\$1.70	6385	F	10	20	\$0,71	\$1.70
3346 3347	B	25 25	100 250	. 69 . 39		3734 3735	B	10 10	100 250	.81 .54		6097 6341	F	10 10	20 20	.81 .74	1.94 1.78	6386 6387	F	10 10	20	.66 .69	1.58 1.66
3348	B	25 25	250 250	.42	1.00	3736	B	10 25	250 50	.51	1.22	6342 6343	F	10 10	20 20	.71 .66	1.70 1.58	6388 6389	F	10 10	20 20	.71 .74	1.70
3349 3350	В	25	250	.39	.94	3761	В	25	100	.47	1.13	6344 6345	F	10 10 10	20	. 69	1.66	6404 6405	F	10 10	20 20	.89	2.14
3351 3352	B B	25 25	50 50	.71 .74	1.78	3762 3763	B	25 25	100 50	.44	1.70	6346	F	10	20 20	.71 .74	1.71	6413	É	iò	20	.86 .81	1.94
3353 3354	B	25 25	100	.44 .47		3764 3765	B	25 25	100 100	.44		6369 6370	F	10 10	20 20	.74 .71		6414 6415	F	10 10	20 20	.84 .86	2.02
3355	B	25 25	100 100	.41 .44		5795 5796	F	10	20 20	.71		6371 6372	F	10 10	20 20	.66 .69	1.58 1.66	6416 6417	F	10 10	20 20	.89 .86	
3356 3731	В	10	100	.71	1.70	5900	F	iŏ	20	.71	1.70	6374	F	iŏ	20	.74	1.78	6418	F	iŏ	20	.96	
3731 3732	B	10 10	100 250	.71	1.70 1.08	5900  5901	F	10 10	20 20	.81		6374 6384	F	10	20 20	.74		6418	F	10	20	.96	2.30

Ceiling and Rosette Sockets with chains over 18 inches in length add to list price per foot \$0.10. Mfrs. List \$0.24, All pull switches are equipped with short chain, 6 feet linen cord and No. 5919 adjustable acord extra cord \$0.01 per foot list. Mfrs. List \$0.02. The steps on the fixture caps and fixture sockets listed above are designed to accommodate \$\frac{1}{2}\$ inch. \$\frac{1}{2}\$ inch fixture struts.

# "QUICK CATCH" SOCKETS AND PULL SWITCHES

National Electrical Code Standard Pull and Key Sockets Sockets 600 Watts, 250 Volts Keyless Sockets 600 Watts, 250 Volts All Pull Switches 3 Amperes, 115 Volta 1 Amperes, 250 Volts		Surface Wiring Base Carton 10	Wood Moulding Base	Condulet Base	Angle Concealed Base	One-Way National Base	Two-Way National Base	Concealed Rosette Base*	Cleat Rosette Base
No. 60		No 3885	No. 3888	No. 3891	No. 3746	No. 3855	No. 3858	No. 3737*	No. 3740*
Pull Socket	-								
Carton 25		Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10
No. 61		No. 3886	No. 3889	No. 3892	No. 3747	No. 3856	No. 3859	No. 3738*	No. 3741*
Key Socket		NO. 3880	No. 3883	No. 3892		10. 3800	10.505		
Carton 25		Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10
No 62		No. 3887	No. 3890	No. 3893	No. 3748	No. 3857	No. 3860	No 3739*	No. 3742*
Keyless Socket									
Carton 25		Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10
No. 63		No. 6347	No. 6348	No. 6349	No. 6350	No. 6351	No. 6352	No 6353*	No. 6354*
Ceiling Switch		Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10
No. 64		No 6419	No. 6420	No. 6421	No. 6422	No. 6423	No. 6424	No. 6428	No. 6429
Fixture Switch			10.0420	1002		10.0425		T.	Ų
Carton 10		Carton 9 10	Carton 9 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10
No. 65		No. 6029	No. 6030	No. 6031	No. 6375	No. 5942	No. 5943	No. 5902*	No. 5903*
Rosette Switch			T,	U	U,		7	U	V
Carton 10	1	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10
No. 66		No. 6390	/ No. 6391	No. 6392	No. 6393	No. 6394	No 6395	No. 6396*	No. 6397*
Wall Switch	Y	EUT HUN							
	-				4				4
Carton 10		Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10

List No.	Sched- ule		Std. Pkg.	List	W.E. List		Sched- ule			List	W. E. List Each		Sched- ule		Std. Pkg.	Mfrs. List Each	W.E. List Each		Sched- ule	Car- ton	Std. Pkg.	Mfrs. List Each	List
3737 3738 3739 3740 3741 3742 3746 3748 3855 3856 3857 3858 3859 3860	B B B B B B B B B B B B B B B B B B B	10 10 10 10 10 10 10 10 10 10 10 10 10	-	-	\$2.64 1.80 1.73 2.64 1.80 1.73 1.82 1.10 1.70 1.06 98 1.70	3885 3886 3887 3888 3889 3890 3891 3892	B B B B B B B	10 10 10 10 10 10 10 10 10 10 10	-	-	\$1.82 1.18 1.10 1.70 1.06 98 1.82 1.18 1.10 2.44 2.44	6029 6030 6031 6347 6348 6349 6350 6351 6352	FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF	10 10 10 10 10 10 10 10 10 10 10 10 10 1	20 20 20 20 20 20 20 20 20 20 20 20 20 2	76 71 76 76 71 76 76 71 76 71 1 02 1 02 76 76	1 82 1 70 1 82 1 82 1 70 1 82 1 70 1 82 1 70 1 70 2 44 2 44 1 82 1 82	6392 6393 6394 6395 6396 6397 6419 6420 6421		10 10 10 10 10 10 10 10 10 10 10 10 10 1	-12	\$0.76 .76 .71 .71 .102 1.02 .91 .86 .91 .91 .86 .86	\$1.82 1.82 1.70 1.70 2.44 2.44 2.18

Standard finishes are brush brass and polished brass. Brush brass shipped unless otherwise specified. "Quick Catch" devices supplied with threaded shells. For special finishes see listing elsewhere.

For prices of socket parts see listing elsewhere. Sockets furnished with chains over 8 inches in length except ceiling and rosette, add to list per foot \$0.24. Mfrs. List \$0.10.

# "QUICK CATCH" SOCKETS AND PULL SWITCHES

National Electrical Code Standard Pull and Key Sockets 250 Watta, 250 Vots Keyless Sockets 660 Watta, 250 Vots All Pull Switches 3 Amperes, 125 Vots 1 Ampere, 250 Vots	Two Wire Moulding Base*	Three Wire Moulding Base*	Small Covered Ceiling Base	Insulated Ceiling Base 3%" Outlet Box	Large Covered Ceiling Base	Insulated Ceiling Base 4" Outlet Box Carton 5
No. 60'	No. 3743*	No. 3547*	No. 3749	No. 3750	No. 3877	No. 3880
Pull Socket	W. SAS		10.5745	1	TM.	
Carton 25	Carton 10	Carton 10	Carton 2	Carton 2	Carton 1	Carton 1
No. 61 Key Socket	No. 3744*	No. 3548*	No. 3751	No. 3752	No. 3878	No. 3881
Carton 25	Carton 10	Carton 10	Carton 2	Carton 2	Carton 1	Carton 1
No 62 Keyless Socket	No. 3745	No. 3549*	No. 3753	No. 3754	No. 3879	No. 3882
Carton 25	Carton 10	Carton 10	Carton 2	Carton 2	Carton 1	Carton 1
No. 63 Ceiling Switch	No. 6355	No 6356*	No. 6357	No. 6358	No. 6359	No. 6360
No. 64 Fixture Switch	No. 6430	No. 6431	No. 6432	No. 6433	No. 6434	No. 6436
No. 65	No. 5904*	No. 6026*	No. 5905	No. 5906	No. 5949	No. 5950
Rosette Switch	V	U	T	T	T	T
Carton 10	Carton 10	Carton 10	Carton 2	Carton 2	Carton 1	Carton 1
No. 66 Wall Switch	No. 6398*	No. 6426	No. 6399	No. 6400	No. 6401	No. 6402
Carton 10	Carton 10	Carton 10	Carton 2	Carton 2	Carton 1	Carton 1
	(Mfra I I	A/ E II		IMfro I W E I		1 1 Mfm

List No.		Sched- ule		Std. Pkg.	List	W. E. List Each	List No.	Sched- ule	Car- ton	Std. Pkg.	Mfrs. List Each	List	List No.	Sched- ule				W. E. List Each
3547	1	В	10	20	\$1.10	\$2.64	3882	В	1	100	.90	\$2.16	6360	F	1	20	1.20	\$2.88
3548		В	10	100	.75	1.80	5904	F	10	20	1.02	2.44	6398	F	10	10	1.02	2.44
3549		В	10	50	.72	1.72	5905	F	2	20	.90	2.16	6399	F	2	20	.90	
3743		В	10	20	1.10	2.88	5906	F	2	20	.90		6400	F	2	20	.90	2.16
3744		В	10	100	.75	1.80	Base						6401	F	1	20		2.88
3745		В	10.	50			Two-wire	В	10	50	.49	1.18	6402	F	10	10		2.88
3749		В	2	50	.98		Three-wire	В	10	56	.49	1.18	6430	F	10	10	1.17	2.81
3750		В	2	50	.98	2.35	Small covd.	В	10	100	. 57	.89	6431	F	10	10	1.17	2.81
3751		. B	2	50	. 63	1.51	5949	F	1	20	1.20	2.88	6432	F	2	20	1.05	2.52
3752		В	2	100		1.51	5950	F	1	20	1.20	2.88	6433	F	2	20	1.05	2.52
3753		В	2	100			6026	F	10	20	1.02		6434	F	1	20	1.35	3.26
3754		В	2	100	.60	1.44	6355	F	10	10	1.02		6436	F	1	20	1.35	3.26
3877		В	1	50	1.28	3.09		F	10	10	1.02	2.44	Base		1.00			
3878		В	1	100				F	2	20	.90	2.16	Insulated	В	10	100	.37	. 89
3879		B	1	100			6358	F	2	20	.90	2.16	Covd. ceil.	В	5	100	.67	1.61
3880		B	1	50			6359	F	1	20	1.20	2.88	Ins. ceiling	В	5	100	.67	1.61
3881		B	1	100	.93	2.23	September 1									T	1	

Ceiling and Rosette sockets with chains over 18 in. in length, add to list per ft; \$0.21. Mirs (L) \$0.010. All pull switches are equipped with short chain 6 ft. linen cord and No. 5919 Adjustable Acorn, extra cord \$0.02 per ft. list. Mfrs. List \$0.01. For listing of separate care and bases see elsewhere.

# "QUICK CATCH" ELECTROLIER SOCKETS Schedule "B"

								Berreadi
National Electrical Code Standard Pull Sockets 250 Watts, 250 Volts Key Sockets 250 Watts, 250 Volts Keyless Sockets 660 Watts, 250 Volts All Pull Switches J Amperes, 125 Volts Ampere, 250 Volts	%-inch	W-inch	94-inch	Pendent	16-inch Male	X-inch Male	14-inch Male	%-inch Angle
	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25
No. 70 Pull Socket	No 3821	No. 3823	No. 3826	No. 3210	No. 3851	No. 3211	No. 3212	No. 3842
Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25
No. 71	No. 3822	No. 3824	No. 3827	No. 3213	No. 3852	No. 3214	No. 3215	No. 3843
Key Socket		1	-	1		1	1	1
Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25
No. 72	No. 3756	No. 3825	No. 3828	No. 3216	No. 3853	No. 3217	No. 3218	No: 3844
Keyless		â		1			A	9
Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25
No. 73	No. 3899	No. 3900	No. 3901	No. 3902	No. 3903	No. 3904	No. 3905	No. 3906
Keyless Short								ALC: N
							1	
Carton 25	Earton 25	Carton 25	Capton 25	Carton 25	Carton 25	Carton 25	Carton 25	Carton 25

** .		~	a	Mfrs.							W. E.				1.00	Mfrs.	W. E.
List	Sched-			List	List		Sched-	Car-		List	List		Sched-	Car-	Std.	List	List
No.	ule	ton	Pkg.	Each	Each	No.	ule	ton	Pkg.	Each	Each	No.	ule	ton	Pkg.	Each	Each
70	В	25	500	\$0.53			В	25	250	\$0.39	\$0.94	3851	В	25	250	\$0.60	\$1.44
71	В	25	500	. 26	.62	3756	В	25	500	.30		3852	В	25	500	.33	
72	В	25	500	. 23	. 55	3821	В	25	250	. 60		3853	B	25	500	.30	.72
73	В	25	500	. 23		3822	В	25	500	. 33		3899	B	25	500	.30	.72
3210	В	25	250	. 60		3823	В	25	100	. 69	1.66		В	25	250	39	.94
3211	В	25	100	. 69		3824	В	25	250	.42	1.00	3901	В	25	250	.36	
3212	В	25	100	. 69		3825	В	25	250	.39	.94	3902	В	25	500	.30	.72
3213	В	25	500	.33		3826	В	25	100	. 66		3903	В	25	500	.30	.72
3214	В	25	250	.42	1.00	3827	В	25	250	. 39	.94	3904	В	25	250	.39	
3215	В	25	250	.42	1.00	3828	В	25	250	. 36		3905	В	25	250	.39	
3216	В	25	500	.30		3842	В	25	50	.65	1 56	3906	В	25	100	.35	. 84
3217	В	25	250	. 39		3843	В	25	100	.38	.91	1/8 in. male	В	25	50	.07	.17
1/8 in. cap	В	25	500	.07		3844	В	25	100	. 35	.84			25	50	.16	.38
14 in. cap	В	25	100	.16	.38	3% in. cap	В	. 25	250	.13	.31			25	. 50	.16	.38
												1/8 in. angle		25	100	.12	. 29

For special finishes see listing elsewhere. All separate pull socket bodies equipped with 8 inch chains. For listing of separate electrolier caps and bases see elsewhere. "Quick Catch" devices supplied with threaded shells.

SEPARATE CAPS, BASES AND BODIES FOR STANDARD "QUICK CATCH" DEVICES

_	1 1		1	1	Mfrs.	W. E.	1	1	and Quien enten	1		1 Mfma I	W E
List	Sched-		Car-	Std.	List			Sched-	The state of the s	Car-	Std.	List	List.
No.	ule	Description	ton	Pkg.	Each			ule	Description	ton	Pkg.	Each	Each
60	B	Pull socket body, 8 in.					24	В	14 in, angle fixture cap.	25	50	\$0.21	\$0.50
		chain	25	250	\$0.53	\$1.27	25	В	Small concealed base	10	250	.18	
79	B	Pull socket body, 18		100			26	В	Small covered con	1		11000	127
	1 3 11	in. chain	25	250	.61				cealed base	10	250	.28	.67
61	В	Key socket body	25	500	.26		27	В	Surface wiring base	10	250	.23	.55
62	В	Keyless socket body	25	500	. 23	.55	28	В	Wood moulding base	10	100	.18	.67 .55 .43 .55 .55
63	F	Pendent pull switch		1			29	В	1/2 in. condulet base	10	100	. 23	.55
		body	25	50	. 53	1.27	30	В	Angle concealed base	10	/100	.23	.55
64	F	Fixture pull switch				4.000	31	B	One-way National base	10	100	.18	. 43
100	100	body	25	50	. 68	1.63	32	B	Two-way National			10.15	
65	F	Rosette pull switch							base	10	100	.18	.43
24	-	body	25	50	. 53	1.27		B	Concealed rosette base.	10	50	.49	1.18
66	F	Wall pull switch body.	25	50	. 53	1.27		B	Cleat rosette base	10	50	.49	1.18
11	В	1/8 in. cap	25	500	.07		35	B	Two-wire moulding	16		10.00	
12	В	¼ in. cap	25	100	.16	.38			base	10	50	.49	1.18
13	В	% in. cap	25	250	.13		36	В	Three-wire moulding	1.2			
14	В	Pendent cap	25	500	.07	.17			base	10	50	.49	1 18
15	В	18 in. male thread cap.	25	100	.07	.17		В	Small covered ceiling	11 0		1.0	
16	В	in. male thread cap.	25	50	.16	.38			base	10	100	.37	. 89
17	В	3/8 in. male thread cap.	25	100	.16	.38	38	B	Insulated ceiling base			100	
18 19	В	18 in. angle cap	25	100	.12	.29		1	for 3¼ in. outlet	100		1500	
19	В	in. angle cap	25	50	.21	.43			boxes	10	100	,37	.89
20	B	36 in. angle cap	25	50	.18	.50		В	Large covered ceiling	1.9	100	1	Link
21	В	1/8 in. fixture cap	25	100	.13	.31			base	5	100	. 67	1,61
22	B	14 in, fixture cap	25	100	.16	.38		В	Insulated ceiling base	00	001	100	0.00
23	1 B 1	1/8 in. angle fixture cap.	25	50	.18	43	111		for 4 in. outlet boxes.	5	100	.67	1.61

# "QUICK CATCH" ELECTROLIER

#### 14-inch Angle Fixture 14-inch Angle Carton 25 No. 3363 No. 3364 No. 3357 No. 3848 No. 3358 No. 3845 Carton 25 No. 3366 No. 3359 No. 3360 No. 3365 No. 3849 No. 3846 Carton 25 No. 3368 No. 3362 No. 3361 No. 3367 No. 3847 No. 3850 Carton 25 No. 3912 No. 3910 No. 3911 No. 3908 No. 3909 No. 3907 Carton 25 Çarton 25 Carton 25

# "QUICK CATCH" AND PRESTURN SOCKETS AND PULL SWITCHES WITH PORCELAIN STRAIN RELIEF BUSHING



No. 3404

"Quick Catch" List No.	Pres- turn List No.	Description	Std. Pkg.	List Price
55	148	*Pendent cap	500	\$0.07
3404	3401	*Pull socket	250	.60
3405	3402	*Key socket	500	.33
3406	3403	*Keyless socket	900	. 30

*Car	ton, 25.	Sch	edul	e "F"
6576		*Ceiling pull switch	20	\$0.60
6577	6581	*Fixture pull	20	.75
6578	6582	*Rosette pull	20	.60
6579	6583	*Wall pull	20	. 60

\*Carton, 10. These socket caps interchange with all standard "Quick Catch" and Presturn de-

Electrolier Sockets

Schedule "B"

List No. 3357 3358 3359 3360 2261	Schedule  B B B B B B B B	Carton 25 25 25 25 25 25 25 25	Std. Pkg. 100 100 250 250 250	Mfrs. List Each \$0.66 .69 .39 .42 .36	W. E. List Each \$1.58 1.66 .94 1.00	List No. 3848 3849 3850 3907 3908	Schedule  B B B B B B B B B B B B B B B B B B	Carton  25 25 25 25 25 25 25 25	Std. Pkg.  50 100 100 100 100 250	Mfrs. List Each \$0.71 .44 .41 .44 .41	\$1.70 1.06 .98 1.06 .98
3357	Schedule	25	100	\$0.66	\$1.58	3848 3849	B	25	100	.44	1.06
3359 3360	B B	25 25	250 250	.39	1.00	3907	• B B	25 25	100 100	.44	1.06
3361 3362 3363	BBB	25 25	250 50	.39	1.70 1.78	3909 3910 3911	B B B	25 25 25	250 250 100	.39	.94
3364 3365 3366	B B B	25 25 25	100 100	.74 .44 .47	1.06	3912 ¼ in. angle	E B B	25. 25. 25.	100 50 50	.44 .21 .18	1.06 .50 .43
3367 3368	B B	25 25 25	100 100 50	41 44 74	1.06 1.78	38 in. angle 18 in. fixture 14 in. fixture	B B	25 25	50 50	.13 .16 .18	.31 .38 .43
3845 3846 3847	B B B	25 25 25	100	.47	1.13 1.06	1/8 in, angle	B B date 5%, 3	25 25 4 and 3/8	inch fix	ture stems	.50

The steps on the fixture caps listed above are designed to accommodate \( \frac{5}{8}, \frac{3}{4} \) and \( \frac{7}{8} \) inch fixture stems. Pull sockets with chains over 8 inches in length, add to list per foot \( \frac{8}{10} \). 10.

# SEPARATE CAPS AND BODIES FOR ELECTROLIER "OUICK CATCH" DEVICES

List No.	Description	Std. Pkg.	Mfrs. List Each	W. E Lis Each
70	*Pull socket body	250	\$0.53	\$1.2
70 71	*Key socket body	500	. 26	.6
72	*Keyless socket body	500	. 23	. 5
73	*Keyless socket body, short shell.	500	.23	.5
41	*1/s in. cap	500	.07	.1
	*14 in. cap	100	.16	. 3
12	*3/8 in. cap	250	.13	. 3
43 44	*Pendent cap	500	.07	.1
	*16 in. male thread cap	100	.07	.1
15	*14 in. male thread cap	50	.16	.3
16	*3% in. male thread cap	100	.16	.3
47 48	*1/s in. angle cap	100	.12	.2
	*14 in. angle cap	50	.21	
49	*3% in. angle cap	50	.18	1 .4
50	*1/2 in. fixture cap	100	.13	1 3
51	*14 in. fixture cap	100	.16	1 .3
52	*1/2 in. angle fixture cap	50	.18	.4
53 54	*14 in. angle fixture cap	50	,21	1 .

\*Carton, 25.

#### PARTS OF SOCKETS

Description	Std. Pkg.	Mfrs. List Each	W. E. List Each
Shells, key, without linings	250	\$0.071/2	\$0.19
Shelle keyless without linings	250	.071/2	.19
Shalls will without linings	250	.071/2	.19
Cane le in without linings	250	.061/2	.17
Cans 1/2 in without linings	250	.151/2	.38
Cans 36 in without linings	250	.121/2	.31
Cans pendent, without linings	250	.061/2	.17
Linings shell, all kinds	250	.021/2	. 07
Linings can, all sizes	250	.001/2	.02
Interiors pull without chain or eyelet	250	.30	.72
Interiors, pull, with chain, acorn and	250	.43	1.03
eyelet	250	.16	.38
Interiors, key	250	.19	.46
Interiors, key, 660 watts	250	.13	.31

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# "LOCK SHELL" SOCKETS













No. 3300

# Two Screw Fastenings PULL SOCKETS

Schedule "B"

I OLL SOCKET	9			Schede	ne b
Description	Carton	Pkg. Wt. Lbs.	Std. Pkg.	Mfrs. List Each	W. E List Each
Pull ½ in. cap	25	65	250	\$0.60	\$1.44
Pull, ¼ In. cap			100	.69	1.65
Pull, 3% in. cap	25	30	100	.66	1.58
Pull, pendent cap	25	68	250	.60	1.44
	THREA	D CAPS	5	121 13	BEN !
Pull, ½ in. male thread cap	25	70	250	\$0.60	\$1.44
Pull, ¼ in. male thread cap	25	30	100	.69	1.65
Pull, 3% in. male thread cap	25	30	100	.69	1.65
KEYLESS SOCKE	TS	7			Control of the last
Keyless, ½ in. cap.	25	127	500	\$0.30	\$0.72
Keyless, ¼ in. cap	25	65	250	.39	.94
Keyless, 3% in. cap	25	65	250	.36	.86
Keyless, pendent cap	25	135	500	.30	.72
	Pull ½ in. cap Pull, ¼ in. cap Pull, ¾ in. cap Pull, ¾ in. cap Pull, 9s in. cap Pull, pendent cap  Pull SOCKETS WITH MALE  Pull, ¼ in. male thread cap Pull, ¼ in. male thread cap Pull, ¾ in. male thread cap Pull, ¾ in. male thread cap	Pull \( \frac{1}{8} \) in. cap \( 25 \)   Pull, \( \frac{1}{4} \) in. cap \( 25 \)   Pull, \( \frac{1}{4} \) in. cap \( 25 \)   Pull, \( \frac{1}{8} \) in. cap \( 25 \)   Pull, \( \frac{1}{8} \) in. cap \( 25 \)   Pull, \( \frac{1}{8} \) in. male thread cap \( 25 \)   Pull, \( \frac{1}{4} \) in. male thread cap \( 25 \)   Pull, \( \frac{1}{4} \) in. male thread cap \( 25 \)   Pull, \( \frac{1}{8} \) in. male thread cap \( 25 \)   Expless \( \frac{1}{8} \) in. cap \( 25 \)   Keyless, \( \frac{1}{8} \) in. cap \( 25 \)   Keyless, \( \frac{1}{4} \) in. cap \( 25 \)   Keyless, \( \frac{1}{4} \) in. cap \( 25 \)   Keyless, \( \frac{1}{8} \) in. cap \( 25 \)   Keyless, \( \frac{1}{8} \) in. cap \( 25 \)   Keyless, \( \frac{1}{8} \) in. cap \( 25 \)   Keyless, \( \frac{1}{8} \) in. cap \( 25 \)   Keyless, \( \frac{1}{8} \) in. cap \( 25 \)   Keyless, \( \frac{1}{8} \) in. cap \( 25 \)   Keyless, \( \frac{1}{8} \) in. cap \( 25 \)   Keyless, \( \frac{1}{8} \) in. cap \( 25 \)   Keyless, \( \frac{1}{8} \) in. cap \( 25 \)   Keyless, \( \frac{1}{8} \) in. cap \( 25 \)   Keyless, \( \frac{1}{8} \) in. cap \( 25 \)   Keyless, \( \frac{1}{8} \) in. cap \( 25 \)	Description   Carton   Pkg. Wt. Lbs.	$\begin{array}{ c c c c c } \hline & Description & & Carton & Pkg. Wt. Lbs. & Pkg. \\ \hline Pull $\frac{1}{2}$ in. cap & 25 & 65 & 250 \\ Pull, $\frac{1}{2}$ in. cap & 25 & 65 & 250 \\ Pull, $\frac{3}{2}$ in. cap & 25 & 30 & 100 \\ Pull, $\frac{3}{2}$ in. cap & 25 & 68 & 250 \\ \hline \hline Pull, pendent cap & 25 & 68 & 250 \\ \hline \hline PULL SOCKETS WITH MALE THREAD CAPS & \\ \hline Pull, $\frac{1}{2}$ in. male thread cap & 25 & 70 & 250 \\ Pull, $\frac{1}{2}$ in. male thread cap & 25 & 30 & 100 \\ Pull, $\frac{3}{2}$ in. male thread cap & 25 & 30 & 100 \\ \hline \hline \hline \hline \hline & KEYLESS SOCKETS & \\ \hline Keyless, $\frac{1}{2}$ in. cap & 25 & 65 & 250 \\ Keyless, $\frac{1}{2}$ in. cap & 25 & 65 & 250 \\ Keyless, $\frac{1}{2}$ in. cap & 25 & 65 & 250 \\ \hline \hline \hline \hline \hline \hline \end{tabular}$	Description   Carton   Pkg. Wt. List   Pkg.   List   Each

# 660 Watt Key Sockets "QUICK CATCH" AND PRESTURN SHELLS 660 WATTS—250 VOLTS

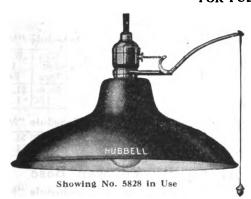
Schedule "B"

"Quick Catch" List No.	Presturn List No.	Description	Carton	Pkg. Wt. Lbs.	Std. Pkg.	Mfrs. List Each	W. E. List Fach
75	89	Socket body	25	100	500	\$0.29	\$0.70
3300	3140	Socket, 1/8 in. cap	25	135	500	.36	.86
3301	3141	Socket, ¼ in cap	25	70	250	.45	1.08
3302	3142	Socket, 3/8 in. cap	25	70	250	.42.	1.00
3303	3143	Socket, pendent cap	25	138	500	.36	.86
3304	3144	Socket, 1/8 in. angle cap	25	30	100	.41	.98
3305	3145	Socket, 1/4 in. angle cap	25	30	100	.50	1.20
3306	3146	Socket, 3/8 in. angle cap	25	30	100	.47	1.13
3307	3147	Wall socket, small concealed base	10	100	250	.47	1.13
3308	3148	Wall socket, small covered concealed base.	10	115	250	.57	1.37
3309	3149	Wall socket, surface wiring base	10	145	250	.52	1.25
3310	3150	Wall socket, wood moulding base	10	120	250	.47	1.13
3311	3151	Wall socket, ½ in. condulet base	10	120	250	.52	1.25
3312	3152	Wall socket, one-way National base	10	125	250	.47	1.13
3313	3153	Wall socket, two-way National base	10	125	250	.47	1.13
3314	3154	Wall socket, angle concealed base	10	50	100	.52	1.25
3315	3155	Ceiling socket, small covered ceiling base.	2	75	100	.66	1.58
3316	3156	Ceiling socket, insulated ceiling base, 31/4			The Park	0.40mg20E0	
	A COUNTY	in. outlet boxes	2	75	100	.66	1.58
3317	3157	Ceiling socket, large covered ceiling base.	1	180	100	.96	2.30
3318	3158	Ceiling socket, insulated ceiling base, 4 in.				and the same	
	- du	outlet boxes	1	180	100	.96	2.30

Standard finishes are polished brass and brush brass. Brush brass shipped unless otherwise specified. For special finishes, see listing elsewhere.

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### **HUBBELL ATTACHMENTS** FOR PULL SOCKETS





#### Attachment for Pull Sockets

This attachment is made of sheet brass of ample stiffness to resist strain of continuous use. Attaches direct to the socket, not to the shade holder. The spring band at the end of the horizontal arm snaps around the socket. A slot hooks over a screw by which the band is secured.

Schedule "F"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
5828^	For 8, 10 and 12 in. reflectors	25	250	21	\$0.25	\$0.60
5829^	For 14 in. reflectors	25	250	21	.25	. 60
59534	For 16 in. reflectors	25	100	24	.30	. 72
<b>5954</b> ^	For 18 and 20 in. reflectors	25	100	26	.30	.72
6317	For 22 in. reflectors	25	100	30	. 40	. 96

# Attachments for Porcelain Pull Sockets

5957	For 8, 10 and 12 in. reflectors	25	250	21	\$0.25	\$0.60
<b>5958</b>	For 14 in. reflectors	25	250	21	.25	. 60
5959	For 16 in. reflectors	25	100	24	.30	.72
5960	For 18 and 20 in. reflectors	25	100	26	.30	.72
5961	For 22 in. reflectors	25	100	30	. 40	.96

	"ECONOMY" ATTACHMENT	ONLY			Schedu	ıle "F"
5880▲ 6306	Attachment only for Standard sockets	25 · 25	250 250	18	\$0.30	\$0.72
0000	Attachment only for electroner sockets		200	1 10	.00	1 . 7 2

Attachments sold separately do not come under Schedule "B" but are subject to Schedule "F" discounts. The above price covers attachments in polished brass and old brass finishes. For nickel or oxidized copper finish add \$0.07 to list.

\*National Electrical Code Standard.

Showing No. 5403 Attached to Lamp

#### Incandescent Light Attachment FOR OIL LAMPS

250 WATTS-250 VOLTS

Pkg. Mfrs. W. F. Carton Std. Wt. Description List Pkg. Quantity Lbs. Each

List No. Each 5403With plug and 7 ft. of silk cord..... 1 \$2.00 \$4.80 Without cord or plug. . 10 20 5529 1 1.50 3.60

This is a handsome and inexpensive device for attaching to an oil lamp, to give it the practical advantage of an electric lamp.

The base of the socket is easily and quickly fitted to any lamp with a common burner, either flat wick or central draft.

It does not injure the lamp in any way and requires no tools to attach. When sold complete it is fitted with 7 feet of silk parallel lamp cord and Hubbell Plug No. 5406. Socket fitted 12 inch chain.

Standard finishes are polished brass, old brass and brush brass. Brush brass shipped unless otherwise specified. For special finishes see listing elsewhere and by

Schedule "F"

Lock Shell

**Pull Socket** 

Pull Socket

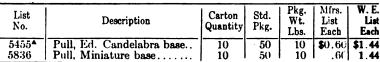
# HUBBELL SOCKETS AND RECEPTACLES

#### Candelabra Pull Sockets





Schedule "M"



	QUICK CATCH	FASTEN	NING	Sc	hedule	"M"
5742▲	Pull, Ed. Candelabra base .	10	50	10	\$0.60	\$1.44
5837	Pull, Miniature base	10	50	10		1.44

# Candelabra Sockets with Ediswan Base

	ck Shell Fastening, 75 Watt			Schedule "M"	
5792 5793	Pull socket, Ediswan base Keyless socket, Ediswan base	10 10	50	10   \$0.70   \$1.68 10   .30   .72	

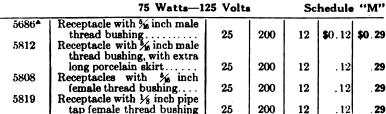
Standard length of chain in pull socket, 3 inches. For chains over 3 inches in length add to list, per foot, \$0.24, Mfrs. List \$0.10. Standard finishes are brush brass, old brass, and polished brass.



Lock Shell Fastening, 75 Watts-	-125	Volts	Sc	hedule	"M"
5753   Keyless socket, Candelabra base	25	200	20	\$0.235	\$0.57
5838   Keyless socket, Miniature base	25		20	.235	.57

5753   Keyless socket, Candelabra base 5838   Keyless socket, Miniature base	25 25	200	20 20	\$0.235 .235	\$0.57 .57

# Candelabra Candle Receptacles



No. 5812 receptacle is provided with porcelain skirt 1/8 inch longer than standard. Is otherwise identical in construction to No. 5686.

Quick Catch

**Pull Socket** 

Keyless Socket

Ediswan Base Kdiswan Base

Keyleas Socket

Male Bushing



# EXTENSIONS, COLLAR AND CANDLE

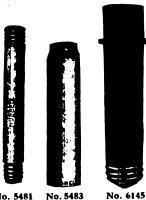
				Critic	Schedu	ıle "F"
I ist No.	Description	Carton Quan- tity	Std. Pkg.	Pkg. Wt. I bs.	Mfrs. I ist Each	W. E. List Each
5481	Extension, candelabra base, 4% ins. long	50	50	1	\$0.35	\$0.84
<b>5</b> 879	Extension, miniature base, 4% ins. long	50	50	1	.35	.84
6145	Candle extension, medium screw base	25	50	5	.50	1.20
5482	Collar, for candelabra socket	50	50	1	.05	. 12
5483 ———	Candle, 4 ins. long, for candelabra socket	25	50	2	. 15	. 36

Extensions over  $4\frac{3}{8}$  inches in length, add to list \$0.24 per inch or fraction thereof. Mfrs. List \$0.10.

Candles over 4 inches in length, add to list \$0.10 per inch or fraction thereof. Mfrs. List \$0.04. Extensions less than 4% inches in length and candles less than 4

inches, take same list price as standard. Extensions, although 43% inches in length, are designed to take a 4 inch candle.

For special finished collar, add to list \$0.05. Mfrs. List \$0.02. Brush brass furnished unless otherwise specified.



No. 5481 No. 5483 Candelabra Candle



Candle

No. 5482-Collar Wiring Devices

### PORCELAIN MOGUL SOCKETS







No. 3390



No. 3289

# Porcelain Mogul Sockets 1500 Watts-600 Volts WITHOUT CAP OR YOKE

Schedule \_"B" Pkg. Wt. W.E. Mfrs. List No. Carton Std. Description List List Pkg. Quantity Lbs. Each Each 3465 \$0.70 Keyless 50 \$1.68

Supporting screw holes spaced 11/2 inches on centers.

#### WITH ALUMINUM CAPS

Keyless, 3/8 in. aluminum cap.	2	75 75 75	50 50 50	\$1.00 1.00 1.00	\$2.40 2.40 2.40	
WITH CAST IRON YOKES						





No. 3468



No. 3461

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#### Porcelain Mogul Sockets

	WITH ALUMINUM CAPS (ONE PIEC	CE PORC	ELAI	N)	Schedule "B"		
List No.	Description	Carton Quantity	Pkg. Wt. Lbs	Std. Pkg.	Mfrs. List Each	W. E. List Each	
3468 3469	Keyless, ¾ in. cap. Keyless, ½ in. cap.	$\frac{2}{2}$	60	50 50	\$0.85 .85	\$2.04 2.04	
15-47-11-1	WITH CAST IRON YOKES (ONE PIE	CE POR	CELA	IN)			
3471 3472 3473	Keyless, ¾ in. cast iron yoke.  Keyless, ½ in. cast iron yoke.  Keyless, ¾ in. cast iron yoke.	$\begin{bmatrix} 2\\2\\2 \end{bmatrix}$	60 60 60	50 50 50	\$0.70 .70 .70	\$1.68 1.68 1.68	
1	WITHOUT CAP OR YOKE (ONE PIE	CE POR	CELA	IN)			
3474	Keyless	2	55	50	\$0.55	\$1.32	

# Porcelain Mogul Cleat Receptacles

1500 WATTS—600 VOLTS						le "B"
3464	Mogul receptacle	2	50	50	\$0.75	\$1.80

## BRASS SHELL MOGUL SOCKETS



# Brass Shell Mogul Sockets

### **EQUIPPED WITH HIGH HEAT-RESISTING LININGS**

1500 WATTS-600 VOLTS

Schedule "B"

List No.	Description	Carton	Package Weight Pounds	Standark Package	Mfrs. List Each	W. E. List Each
3383	Keyless, $\frac{3}{8}$ in. cap.	10	35	50	\$1.50	\$3.60
3384	Keyless, $\frac{1}{2}$ in. cap.	10	38	50	1.50	3.60

#### WITH 31/4 INCH SHADE HOLDER PERMANENTLY ATTACHED

3385	Koylogg 3/ in our	1 1	l 50 i	50	<b>\$</b> 1.80	SA 39
บบดบ	Keyless, $\frac{3}{8}$ in. cap	1	ן טט	00	( மு	34.34
2200	Kaulaga 17 in ann	1	22	50	1 00	4 22
3386	1 Keyless, ½ in. cap	1	1 55	90	1.60	4.32
0000	regress, /2 m. cap.	•	00	00	1.00	7.0-

These Mogul base sockets are fitted with special, high heat-resisting linings capable of withstanding the intense heat generated by Type C gas-filled lamps.

Shell and cap are fastened together by means of a screw thread and held in place by a steel set screw.

# Mogul Keyless Ceiling Sockets

1500 WATTS-600 VOLTS

. WITH PORCELAIN BASE

Schedule "B"

List No.	Description	Carton	Package Weight Pounds	Standard Package	Mfrs. List Each	W. E. List Each
3460	Keyless, for 31/4 and 4 in. outlet boxes	1	95	50	\$1.50	\$3.60
3461	Keyless, for 3¼ and 4 in. outlet boxes, with 3¼ in. shade holder attached	1	100	50	1.80	4.32

#### WITH INSULATED COVERED BASE

3462	Keyless, for 31/4 inch and 4 in. outlet boxes	1	100	50	\$1.75	\$4.20
<b>346</b> 3	Keyless, for $3\frac{1}{4}$ and 4 in. outlet boxes, with $3\frac{1}{4}$					
	in. shade holder attached	1	105	50	2.05	4.90

Diameter of base, 45% inches:

Supporting screw holes, 2¾ inches and 3½ inches on centers.

For 4 inch shade holders for brass shell Mogul sockets, see listing elsewhere.

For special finish on Mogul base sockets without the shade holder, add to list price twice the addition made for special finishes on standard sockets.

For special finish on Mogul base sockets with shade holder, add to list price twice the regular addition for standard socket and the regular addition for the standard 3½ inch shade holder.

Standard finish, brush brass.

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## PORCELAIN SOCKETS AND RECEPTACLES

National Electrical Code Standard Pull Sockets So Watts, 250 Volts								
Key Sockets 50 Watts, 250 Volta Keylesa Sockets	Pendent	½8-inch	1/4-inch	3/g-inch	3/8-inch Aluminum	1/2-inch Aluminum	Concealed Base	Cleat Base
50 Watts, 250 Volts	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10
No. 160	No 3380	No. 3330	No. 3432	No. 3331	No 3387	No. 3336	No. 3420	No. 3423
Pull Socket								
Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10 No. 3424
No. 161	No. 3381	No. 3332	No. 3433	No. 3333	No. 3388	No. 3337	No. 3421	No. 3424
Key Socket							Carton 10	Carton 10
Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10 No. 3389	Carton 10 No. 3338	No. 3422	No. 3425
No. 162 Leyless Socket	No. 3382	No. 3334	No. 3434	No. 3335	No. 5569	140. 3336	10. 5422	
Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10	Carton 10

National Electrical Code Standard Pull Sockets 20 Watts, 20 Volts Key Sockets 20 Watts, 20 Volts Keyless Sockets 660 Watts, 20 Volts	Small Ceiling Base 31/4" Outlet Box  Carton 10	Large Ceiling Base 4" Outlet Box Carton 5
No. 160	No. 3426	No. 3429
Pull Socket	110.0120	En.L Laboration
Carton tu	Carton 2	Carton 1
No. 161	No. 3427	No. 3430
Key Socket	DOT 11 WOOT?	CHI THEO
Carton 10	Carton 2	Carton 1
No. 162	No. 3428	No. 3431
Keyless Socket		
Carton 10	Carton 2	Carton 1

List No.	Std. Pkg.	Mfrs. List Each	W. E. List Each	List No.	Std. Pkg.	Mfrs. List Each	W. E. List Each
160	100	\$0.75	\$1.80	3420	50	\$0.85	\$2.04
161	250	.25	.60	3421	100	.35	.84
162	250	.20	.48	3422	100	.30	.72
3330	50	.85	2.04	3423	50	.85	2.04
3331	50	.85	2.04	3424	100	.35	.84
3332	100	.35	.84	3425	100	.30	.72
3333	100	.35	.84	3432	100	.85	2.04
3334	100	.30	.72	3433	100	.35	. 84
3335	100	.30	.72	3434	100	.30	.72
3336	50	1.00	2.40	Pendent	200	.05	.12
3337	100	.50	1.20	1/8 in. cap	100	.10	. 24
3338	100	.45	1.08	14 in. cap	50	.10	24
3380	100	.80	1.92	3/8 in. cap	100	.10,	. 24
3381	250	.30	.72	½ in. cap	50	.25	.60
3382	250	.25	.60	Concealed		100	
3387	50	1.00	2.40	base	100	.10	.24
3388	100	.50	1.20	Cleat base	100	.10	.24
3389	100	.45	1.03				

Carton quantity 10.
Sockets furnished with chains over 8 inches in length, add to list per foot, \$0.10, Mfrs. List \$0.24. Special finishes take one-half the list price charged for brass shell sockets. Standard finish for brass cap on porcelain sockets is brush brass.

SEI	PARA	TE (	CAPS, I	BASES	AND B	ODI	ES	Schedul	e "B"
List No.	Car-	Std. Pkg.	Mfrs. List Each	W. E. List Each	List No.	Car- ton	Std. Pkg.	M frs. List Each	W. E. List Each
3426	2	50	\$0.95	\$2.28	3431	1	100	\$0.45	\$1.08
3427 3428	2 2 2	100	.45	1.08	34 in.		50	.20	.48
3429 3430	1	50 100	1.00	1.20	4 in.	5	50	.25	.60

List No.	FOR PORCELAIN SOCKETS AND RECEPTACLES Schedule "B"  Description		Lbs.	Std. Pkg.	Mfrs. List Each	W. E. List Each
	Porcelain pull socket body	10	30	100	\$0.75	\$1.80
160	Porcelain pull socket body	10	60	250	.25	
161	Porcelain bull socket body.	10	45	250	.20	.48
162	Porcelain key socket body	10	35	250	.05	.12
150			15	100	.10	.24
151			15	50	.10	.24
152			15	100	.10	.24
153			15	100	.25	.60
154			15	50	.25	.60
155			40	100	.10	.24
156	Constant the section of the section	1.0	45	100	.10	.24
157			25	50 T	.20	.48
158	Small ceiling base for porcelain sockets.	10	350	50	.25	.60
159	Small ceiling base for porcelain sockets.  Large ceiling base for porcelain sockets.	JIIIZear by		7	Wirind	Devices

List

#### PORCELAIN RECEPTACLES











No. 9462

No. 4013

No. 28795

No. 9171

Pkg. Wt.

Std.

Carton

No. 59275

### Porcelain Cleat Receptacles

660 Watts-250 Volts

Sched	me D.
Mfrs.	W.E.
List	List
Each	Each
\$0.15	\$0.36

20

-1- - J.-1 - 44TO !!

\$0.48

No. ()uantity Lbs. Pkg. 250 9402115 10 110 250 4013

Holes for supporting screws are spaced 23% inches on centers. Outside dimensions of base 213 by 233 inches.

28795   Cleat receptacle, round base	ī	10	90	250	\$0.15	\$0.3	<u>36</u>
Holes for supporting screws are spaced 1% inches on center	rs.						

Outside diameter of base 2 16 inches.

9171   Cleat receptacle	10	90   500	\$0.10   \$0.24

Supported by one screw in center. Outside diameter of base 11 inches.

59275   Cleat receptacle—wires raised 1 in. from surface	10	105   250	\$0.18   \$0.43

Holes for supporting screws are spaced 2 inches on centers. Outside dimensions of base  $2\frac{7}{16}$  inches and  $2\frac{1}{12}$  inches.

Arranged with square recess for stove bolts.



No. 50715



No. 25706





### Porcelain Cleat Receptacles

660 Watts-250 Volts

Schedule "B"

Pony cleat receptacle..... 250 **\$**0.15

Holes for supporting screws are spaced  $1\frac{15}{16}$  inches on centers. Dimensions of base  $2\frac{7}{16} \times 2\frac{7}{16}$  inches.

25706 | Street hood socket with side lugs..... \$0.27 10 100 \$0.65

The malleable iron yoke is threaded for 3/8 inch iron ipe.

#### Porcelain Receptacles FOR CONDUIT BOXES AND METAL SIGNS

	660 Watts-250 Volts				Sched	ule "B"
61988	Receptacle with screw ring	10	85	250	\$0.20	\$0.48
*4099		10	100	250	.25	.60

A hole 1½ inches in diameter is required for these receptacles. \*This receptacle is fitted with a separate porcelain base for use with outlet boxes.

These receptacles are constructed with five notches in the base designed to prevent the receptacle turning, once it is installed. One projection in the metal plate bent down into any one of the notches will insure the permanent location of the receptacle in its original position.

Rubber gaskets are regularly supplied, but leather gaskets may be had when so ordered without extra

charge.

The design of these receptacles makes possible the removal of the screw shell without disturbing the

Porcelain rings only, list price \$0.06—standard package 250.



### **HUBBELL MISCELLANEOUS SOCKETS**







No. 5610—Fixture Switch Side Outlet

Wall Switch Metal Covered Base

#### Lock Shell Pull Switches

S P 3 Amperes—125 Volts, 1 Ampere—250 Volts

Schedule "F"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
5027 <sup>4</sup> 5689 <sup>4</sup> 5610 <sup>4</sup>	Lock shell pull switch, porcelain baseLock shell pull switch, metal covered basePendent pull switch, 1/8 in. bushing, side outlet	10 10 10	50 50 50	16 18 14	\$0.71 .81 .60	\$1.70 1.94 1.44
5631	Pendent pull switch, 3/8 in. bushing, side outlet	10	50	15	. 69	1.76







No. 3444

No. 3375

#### Porcelain Sockets WITH "KNOSTRAIN" BUSHING FOR ARMORED CORD

Schedule "B"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
163	Cap only with "Knostrain" bushing. Pull socket with "Knostrain" bushing. Key socket with "Knostrain" bushing. Keyless socket with "Knostrain" bushing	10	50	15	\$0.45	\$1.08
3286		10	50	35	1.20	2.88
3287		10	100	50	.70	1.68
3288		10	100	45	.65	1.56

#### TAPPED FOR 1/2 INCH PIPE AND 3/4 INCH LOCK NUT

173	$\frac{1}{2}$ in. aluminum cap only	10	50	10	\$0.30.	\$0.72
3442	Pull socket, ½ inch aluminum cap	10	50	35	1.05	2.52
3443	Key socket, ½ in. aluminum cap	10	100	50	.55	1.32
3444	Keyless socket, ½ in. aluminum cap	10	100	45	.50	1.20

#### Porcelain Husk Socket

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
3375	Keyless, ½ in. brass covered cap	10	100	45	\$0.30	\$0.72
3377	Keyless, 3/2 in, brass covered cap	10	100	45	.30	1.72

Length of socket overall, 211 inches. Diameter 1½ inches. Special wrench for inserting socket cap in husk, supplied without charge.

\*National Electrical Code.

### ATTACHMENT PLUGS AND CURRENT TAPS

National Electrical Code Standard All Screw Base Plugs	No. 6918 Composition Cap Polarized	Composition	No. 6921 Composition "Knostrain" Polar ized	No. 6565 Br. Cov. Compo., "Knostrain" Polar ized	No. 5419 Porcelain Cap	No. 5420 Composition Cap	No. 5421 Brass Covered Porcelain Cap
All other Plugs, Connectors and Receptacles 6 Amperes, 250 Volts	1						1
No. 6817 Porcelain Base	No. 6815	No. 6816	Cap No. 6921 Base 6817	Cap No. 6565 Base 6817			1
			1	4	☆	¥r	*
No. 6917 Composition Base	No. 6915	No. 6916	Cap No. 6921 Base 6917	Cap No. 6565 Base 6917			The bearing
					☆ .	☆	- th
No. 5607 Porcelain Base	Cap No. 6918 Base No. 5607	Cap No. 6919 Base No. 5607	Cap No. 6921 Base 5607	Cap No. 6565 Base 5607	No. 5406	No. 5408	No. 5410
	•						
No. 5612 Composition Base	Cap No. 6918 Base No. 5612	Cap No. 6919 Base No. 5612	Cap No. 6921 Base 5612	Cap No. 6565 Base 5612	Cap No. 5419 Base No. 5612	No. 5467	Cap No. 5421 Base No. 5612
No. 5756 Porcelain Base Cartridge Fuse	Cap No. 6918 Base No. 5756	Cap No. 6919 Base No. 5756	Cap No. 6921 Base 5756	Cap No. 6565 Base 5756	No. 5729	Cap No. 5420 Base No. 5756	Cap No. 5421 Base No. 5756
No. 5826 Composition Base Cartridge Fuse	Cap No. 6918 Base No. 5826	Cap No. 6919 Base No. 5826	Cap No. 6921 Base 5826	Cap No. 6565 Base 5826	Cap No. 5419 Base No. 5826	Cap No. 5420 Base No. 5826	Cap No. 5421 Base No. 5826
No. 6295 1Current Tap	Cap No. 6918 Base No. 6295	Cap 'No. 6919 Base No. 6295	Cap No. 6921 Base No. 6295	Cap No. 6565 Base No. 6295	No. 5638	Cap No. 5420 Base No. 6295	Cap No. 5421 Base No. 6295
Mu 1 1 i p 1 e							

List Price and Data

Schedule "H"

		CAPS			BASES					BASES				
List No.	Carton	Std. Pkg.	Mfrs. List Each	W. E. List Each	List	Carton	Std. Pkg.	Mfrs. List Each	W. E. List Each	List No.	Carton	Std. Pkg.	Mfrs. List Each	W. E. List Each
5419 5420 5421	10 10 10	50 50 50	\$0.15 .20 .25	\$0.36 .48 .60	5406 5408 5410	10 10 10	250 250 250	\$0.30 .35 .40		5756 5826 6295	10 10 10	100 100 50	\$0.60 .75 .35	\$1 44 1.80 .84
6565 6918 6919	10 10 10	50 50 50	.55 .55 .86	.77 1.32 2.06	5467 5607 5612	10 10 10	250 250 250 250	.40 .15 .20	.96 .36 .48	6815 6816 6817	25 25 10	100 100 100	. 25 . 35 . 15	.60 .84 .36
6921	10	50	.84	2.02	5638 5729	10 10	50 100	. 50 . 75	1.80	6915 6916 6917	25 25 10	100 100 100	. 25 . 35 . 15	.60 .84 .36

Standard finishes for caps, polished brass and brush brass. Brush brass shipped unless otherwise specified. For special finished brass covered caps, add to list 5 cents.

When two catalog numbers appear with illustrations, the base and cap are packed and sold as separate units, the price of the whole being the aggregate of the units. Where only one catalog appears the device is packed complete.

\*Not a practical combination.

## ATTACHMENT PLUGS AND CURRENT TAPS

No. 5523 Brass Covered Composition	No. 6336 Elongated Composition	No. 5657 Br Cov Compo "Knostrain"	No. 5700 Br.Cov.Compo. "Knostrain"	"Knostrain"	No. 5625 Porc. Mult. Current Tap	No. 6335 Compo.Mult. Current Tap	No. 5424 Porcelain Lamp	No. 5897 Composition Lamp
1	8 8			Bushing			Receptacle	Receptacle
ŵ	ŵ	r tr	Ŷ	ŵ	☆	☆	☆	źł.
tr	ά	ά	ά	ជ	ú	ग्रं	û	☆
Cap No 5523 Base No. 5607	Cap No. 6336 Base 5607	Cap No. 5657 Base 5607	Cap No. 5700 Base 5607	Cap No 6328 Base No 5607	Tap No 5625 B 5 6 6 0 7	Tap No 6335 B 5 6 6 8 7	☆	拉
No. 5468	Cap No. 6336 Base 5612	No 5493	No. 5701	Cap No. 6328 Base No. 5612	Tap No. 5625 B 5 6 s e 2	Tap No. 6335 B 5 a 5 6 1 e 2	£	th.
Cap No. 5523 Base No. 5756	Cap No. 6336 Base 5756	Cap No. 5657 Base 5756	Cap No. 5700 Base 5756	Cap No. 6328 Base No. 5756	Tap No 5625 B 5 7 7 5 6	Tap No 6335 B a 57 5 6	Rec. No. 5424 Base No. 5756	Rec. No. 589 B a 's e
Cap No. 5523 Base No. 5826	Cap. No. 6336 Base 5826	Cap No 5657 Base 75826	Cap No. 5700 Base 5826	Cap No. 6328 Base 5826	Tap No. 5625 B	Tap No. 6335 B 5 8 2 6	Rec. No. 5424 B a 5 8 8 2 2 6	Rec. No. 589 B a s e
Cap No. 5523 Base No. 6295	Cap No. 6336 Base No. 6295	Cap No. 5657 Base No. 6295	Cap No. 5700 Base No. 6295	Cap No. 6328 Base No. 6295	☆	¥	Rec. No. 5424 Base No. 6295	Rec. No. 589 Base No. 629

## List Prices and Data

		C	APS			BASES						
List No.	Schedule	Carton	Std. Pkg.	Mfrs. List Each	W. E. List Each	List No.	Schedule	Carton	Std. Pkg.	Mfrs. List Each	W. E. List Each	
5424	H H	10 10	50	\$0.25	\$0.60	5468	H	10	250	\$0.50	\$1.20	
5523 5625	Н	10	50 50	.30 .35	72 84	5493 5607	H	10 10	100 250	.65 .15	1.56 .36	
5657 5700	H H	10 10	50 50	. 45 . 55	1.08 1.32	5612 5701	H	10 10	250 100	.20 .75	.48 1.80	
5897 6328	H	10 10	50 50	.30 .35	.72 .84	5756 5826	H	10 10	100 100	. 60 . 75	1.44 1.80	
6336 6365	H	10 10	50 20	. 25 . 60	.60 1.44	6295	н	10	50	. 35	.84	

The above cartridge fuse plugs are furnished complete with 6 ampere Type C baby fuses.

Length overall, 1½ inches; diameter 1½ inch.

These fuses approved by the National Board of Underwriters for use with Hubbell cartridge fuse attachment plugs.

Designed particularly for use with electrically operated portable machines, such as drills, grinders, etc.

When furnished without the fuse, deduct \$0.80 from list. Mfrs. List \$0.25.

#### CURRENT TAPS-FIXTURE RECEPTACLES-CORD CONNECTORS

National Electrical Code Standard All Screw Base Plugs	No. 6918 Composition Cap Polarized	Composition	No. 6921 Composition "Knostrain"	No. 6565 Br.Cov.Compo. "Knostrain"	No. 5419 Porcelain Cap	No. 5420 Composition Cap	No. 5421 Brass Covered Porcelain Cap
660 Watta, 250 Volts All other Plugs, Connectors and Receptacles 6 Amperes, 250 Volts	*	Polarized	Polar	Polar			
*No. 6297 Current Tap	Cap No. 6918 Base No. 6297	Cap No. 6919 Base No. 6297	Cap No. 6921 Base No. 6297	Cap No. 6565 Base No. 6297	No. 5735	Cap No. 5420 Base No. 6297	Cap No. 5421 Base No. 6297
Multipple					0	(0)	
*No. 6339 Current Tap	Cap No. 6918 Base No. 6339	Cap No. 6919 Base No. 6339	Cap No. 6921 Base No. 6339	Cap No. 6565 Base No. 6339	Cap No. 5419 Base No 6339	No. 6338	Cap No. 5421 Base No. 6339
M u i i p i e					6		
No. 6250 Fixture Receptacle	Cap No. 6918 Base No. 6250	Cap No. 6919 Base No. 6250	Cap No. 6921 Base No. 6250	Cap No. 6565 Base No. 6250	Cap No. 5419 Base No. 6250	Cap No. 5420 Base No. 6250	Cap No. 5421 Base No. 6250
with Brass Casing	0		0				
No. 6251 Fixture Receptacle without Casing	Cap No. 6918 Base No. 6251	Cap No. 6919 Base No. 6251	Cap No. 6921 Base 6251	Cap No. 6565 Base 6251	Cap No. 5419 Base No. 6251	Cap No. 5420 Base No 6251	Cap No. 5421 Base No. 6251
9	1					0	-
No. 6252 Fixture Receptacle with %-inch Bushing	Cap No. 6918 Base No. 6252	Cap No. 6919 Base No. 6252	Cap No. 6921 Base No. 6252	Cap No. 6565 Base No. 6252	Cap No. 5419 Base No. 6252	Cap No. 5420 Base No 6252	Cap No. 5421 Base No. 6252
	0						
No. 6253 Fixture Receptacle with & inch Bushing	Cap No. 6918 Base No. 6253	Cap No. 6919 Base No. 6253	Cap No. 6921 Base No. 6253	Cap No. 6565 Base No. 6253	Cap No. 5419 Base No. 6253	Cap No. 5420 Base No. 6253	Cap No. 5421 Base No. 6253
							0
No. 6087 Porcelain Cord Con- nector Body	Cap No. 6918 Base No. 6087	Cap No. 6919 Base No. 6087	Cap No. 6921 Base No. 6087	Cap No. 6565 Base 6087	Cap No. 5419 Base No. 6087	Cap No. 5420 Base No. 6087	Cap No. 5421 Base No. 6087

## List Prices and Data

Schedule "H"

	CAPS					BASES					BASES				
List No. 5419 5420 5421 6565 6918 6919 6921	Carton  10 10 10 10 10 10 10 10 10	Std. Pkg. 50 50 50 50 50 50 50	List Each	\$0.36 60 4.20 .36 .60	List No. 5735 6087 6250 6251 6252	Carton 10 10 10 10 10 10 10 10	Std. Pkg. 50 50 20 20 20	List Each	\$1.20 60 1.08 .72	List No. 6253 6297 6338 6339	Carton 10 10 10 10 10 10	Std. Pkg. 20 50 50 50	Mfrs. List Each 30.50 .35 .65 .45	W. E. List Each \$1.20 .84 1.56 1.08	

Standard finishes, brush brass and polished brass. For other finishes on fixture receptacles, add to list \$0.24. Mfrs. List \$0.10.

For special finished rims on No. 6251 receptacle, add to list \$0.12. Mfrs. List \$0.05.

Brush brass shipped unless otherwise specified.

When two catalog numbers appear with illustration, the base and cap are packed and sold as separate units, the price of the whole being the aggregate of the units. Where only one catalog number appears, the device is packed complete.

## **CURRENT TAPS-FIXTURE RECEPTACLES-CORD CONNECTORS**

No. 5523 Brass Covered Composition	No. 6336 Elongated Composition	No. 5657 Br.Cov.Compo. "Knostrain"	No. 5700 Br.Cov.Compo. "Knostrain"	No. 6328 Compo. Swivel "Knostrain" Bushing	No. 5625 Porc. Mult. Current Tap	No. 6335 Compo, Mult. Current Tap	No. 5424 Porcelain Lamp Receptacle	No. 5897 Composition Lamp Receptacle
Cap No. 5523 Base No. 6297	Cap No. 6336 Base No. 6297	Cap No. 5657 Base No. 6297	Cap No. 5700 Base No. 6297	Cap No. 6328 Base No. 6297	,9 d	÷	Rec. No. 5424 Base No. 6297	Rec. No. 5890 Base No. 6290
Cap No. 5523 Base No. 6339	Cap No. 6336 Base No. 6339	Cap No. 5657 Base No. 6339	Cap No. 5700 Base No. 6339	Cap No. 6328 Base No. 6339	☆,	☆	Rec. No. 5424 Base No. 6339	
Cap No. 5523 Base No. 6250	Cap No. 6336 Base No. 6250	Cap No. 5657 Base No. 6250	Cap No. 5700 Base No. 6250	Cap No. 6328 Base No. 6250	Tap No. 5625 Base No. 6250	Tap No. 6335 Base No. 6250	Rec. No. 5424 Base No. 6250	Rec. No. 589 Base No. 625
Cap No. 5523 Base No. 6251	Cap No. 6336 Base 6251	Cap No. 5657 Base 6251	Cap No 5700 Base 6251	Cap No. 6328 Base No. 6251	Tap No. 5625 B 6 a 5 e 1	Tap No. 6335 B 6 2 s e 1	Rec. No. 5424 B 6 a 2 5 e 1	Rec. No. 589 B a s e
Cap No. 5523 Base No. 6252	Cap No. 6336 Base No. 6252	Cap No. 5657 Base 6252	Cap No. 5700 Base No. 6252	Cap No. 6328 Base No. 6252	Tap No. 5625 B 6 2 5 e 2	Tap No. 6335 B 6 2 s 2 5 2	Rec. No. 5424 Base No. 6252	Rec. No. 589 Base No. 625
Cap No. 5523 Base No. 6253	Cap No. 6336 Base No. 6253	Cap No. 5657 Base 6253	Cap No. 5700 Base No. 6253	Cap No. 6328 Base No. 6253	Tap No. 5625 B 62 s 62 5 73	Tap No. 6335 B 6 2 s e 3	Rec. No. 5424 Base No. 6253	Rec. No. 589 Base No. 625
Cap No. 5523 Base No. 6087	Cap No. 6336 Base 6087	Cap No. 5657 Base 6087	Cap No. 5700 Base 6087	Cap No. 6328 Base No. 6087	Tap No. 5625 B 6 0 s e 7	Tap No. 6335 B 6 6 8 7	Rec. No. 5424 Base No. 6087	Rec. No. 589

## List Prices and Data

Schedule "H"

Mil alu	School	CAPS	3		BASES						
List No.	Carton	Std. Pkg.	Mfrs. List Each	W. E List Each	List No.	Carton	Std. Pkg.	Mfrs. List Each	W. E. List Each		
5424 5523 5625 5657 5700 5897 6328 6335 6336	10 10 10 10 10 10 10 10 10	50 50 50 50 50 50 50 50 50	\$0.25 .30 .35 .45 .55 .30 .35 .40 .25	1.08 1.32 .73	6297 6339 6250 6251 6252 6253	10 10 10 10 10 10 10	50 50 50 20 20 20 20	\$0.25 .35 .45 .45 .30 .45 .50	\$0.60 .84 1.09 1.08 .72 1.08 1.20		

In cases where base and cap are separately packed but ordered at the same time, the standard package quantity of both will be that applying to the base.

All devices listed above packed 10 to a carton.

For special finished, brass covered caps, add to list \$0.05.

\*Not a practical combination.



### CORD CONNECTORS AND WALL RECEPTACLES

National Electrical Code Standard All Screw Base Plugs 660 Watts 250.Volts All other Plugs, Connectors and	No. 6918 Composition Cap Polarized	No. 6919 Brass Covered Composition Polarized	No. 6921 Composition "Knostrain" Polar ized	No 6565 Br. Cov. Compo., "Knostrain" ized	No. 5419 Porcelain Carp	No. 5420 Composition	No. 5421 Brass Covered Porcelain Cap.
Receptacles 6 Amperes, 250 Volts No: 5574	Cap No. 6918	Cap No. 6919	Cap No. 6921	Cap No. 6565	Cap No. 5419	No. 5518	Cap No. 5421
Connector Body	Base No. 5574	Base No. 5574	Base 5574		Base No. 5574	-	Base No. 5574
No. 6095 Connector Body "Knostrain" Bushing	Cap No. 6918 Base No. 6095	Cap No. 6919 Base No. 6095	Cap No. 6921 Base No. 6095	Cap No. 6565 Base 6095	Cap No. 5419 Base No. 6095	Cap No. 5420 Base No. 6095	Cap No. 5421 Base No. 6095
No. 5617 Concealed Recept. Screws 15" Centers	Cap No. 6918 Base No. 5617	Cap No. 6919 Base No. 5617	Cap No. 6921 Base No. 5617	Cap No. 6565 Base No. 5617	Cap No. 5419 Base No. 5617	Cap No. 5420 Base No. 5617	Cap No. 5421 Base No. 5617
No. 5618 Cleat Recept. Screws 111 Centers	Cap No. 6918 Base No. 5618	Cap No. 6919 Base No. 5618	Cap No. 6921 Base No. 5618	Cap No. 6565 Base No. 5618	Cap No. 5419 Base No. 5618	Cap No. 5420 Base No. 5618	Cap No. 5421 Base No. 5618
No 5619 Moulding Recept. Screws 1/8" Centers	Cap No. 6918 Base No. 5619	Cap No. 6919 Base No. 5619	Cap No. 6921 Base No. 5619	Cap No. 6565 Base No. 5619	Cap No. 5419 Base No. 5619	Cap No. 5420 Base No. 5619	Cap No. 5421 Base No. 5619
No 5939 One-Way Recept National Moulding	Cap No 6918 Base No 5939	Cap No 6919 Base No. 5939	Cap No. 6921 Base No. 5939	Cap No. 6565 Base No. 5939	Cap No. 5419 Base No. 5939	Cap No. 5420 Base No. 5939	Cap No. 5421 Base No. 5939
No. 6068 Two-Way Recept National Moulding	Cap No. 6918 Base No 6068	Cap No. 6919 Base No. 6068	Cap No. 6921 Base No. 6068	Cap No. 6565 Base No. 6068	Cap No. 5419 Base No. 6068	Cap No. 5420 Base No. 6068	Cap No. 5421 Base No. 6068

### List Prices and Data

		Caps		•			Bases	Sched	ule "H"
List No.	Carton	Std. Pkg.	Mfrs. List Each	W. E. List Each	List No.	Carton	St <b>d.</b> Pkg.	Mfrs. List Each	W. E. List Each
5419	10	50	\$0.15	\$0.36	5574	10	50	\$0.30	\$0.72
5420	10	50	.20	.48	5617	10	50	.30	.72
5421	10	50	.25	. 60	5618	10	50	.30	.72
6565	10	50	. 55	1.32	5619	10	50	.30	.72
6918	10	50	. 15	.36	5939	10	50	.30	.72
6919	10	50	.25	. 60	6068	10	50	.30	.72
6921	10	50	.25	.60	1				-

All devices listed above packed 10 to a carton. Standard finishes for caps, brush brass, polished brass Brush brass shipped unless otherwise specified. For special finished brass covered caps, add to list \$0.12; Mfrs. List \$0.05.

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## CORD CONNECTORS AND WALL RECEPTACLES

No. 5523	No. 6336	No. 5657	No 5700	No. 6328	No. 5625	No. 6335	No. 5424	No. 5897
Brass Covered	Elongated	Br Cov Compo.	Br Cov Compo	Compo Swivel	Porc. Mult.	Compo. Mult.	Porcelain	Composition
Composition	Composition	"Knostrain"	"Knostrain"	"Knostrain"	Current Tap	Current Tap	Lamp	Lamp
				Bushing	2 2	0	Receptacle	Receptacle
Cap No. 5523 Base No. 5574	Cap_No. 6336 Base 5574	Cap 5657 Base 5574	Cap No. 5700 Base 5574	Cap No 6328 Base No 5574	Tap No. 5625 B 55 a 57 e 4	Tap No. 6335 B 55 s 7 e 4	Rec No. 5424 B 5 a 5 7 e 4	Rec No 5897 B a 57 e 57
Cap No. 5523 Base No. 6095	Cap No. 6336 Base 6095	Cap No.5657 Base 6095	No. 5699	Cap No. 6328 Base No. 6095	Tap No. 5625 B 6 6 a 0 9 e .5	Tap No. 6335 B 6 6 a 9 9 e 5	Rec No 5424 Base No. 6095	
Cap No. 5523	Cap No. 6336	Cap No. 5657	Cap No 5700	Cap No. 6328	Tap No. 5625	Tap No. 6335	Rec. No 5424	Rec No 5897
Base No. 5617	Base No. 5617	Base 5617	Base No 5617	Base No 5617	Base No. 5617	Base No. 5617	Base No 5617	Base No 5617
Cap No. 5523	Cap No. 6336	Cap No. 5657	Cap No. 5700	Cap No 6328	Tap No 5625	Tap No 6335	Rec No 5424	Rec No. 5897
Base No. 5618	Base No. 5618	Base 5618	Base No. 5618	Base No. 5618	Base No 5618	Base No. 5618	Base No 5618	Base No. 5618
Cap No. 5523	Cap No. 6336	Cap No. 5657	Cap No 5700	Cap No 6328	Tap No 5625	Tap No 6335	Rec No 5424	Rec No 5897
Base No. 5619	Base No. 5619	Base No. 5619	Base No 5619	Base No. 5619	Base No. 5619	Base No 5619	Base No 5619	Base No 5619
Cap No. 5523	Cap No. 6336	Cap No 5657	Cap No 5700	Cap No 6328	Tap No 5625	Tap No 6335	Rec No 5424	Rec No 5897
Base No. 5939	Base No. 5939	Base 5939	Base No. 5939	Base No 5939	Base No. 5939	Base No 5939	Base No 5939	Base No 5939
Cap No. 5523 Base No. 6068	Cap No 6336 Base No 6068	Cap No. 5657 Base 6068	Cap No. 5700 Base No. 6068	Cap No 6328 Base No 6068	Tap No 5625 B 6 0 s 6 8	Tap No 6335 B 6 a 0 s e 8	Rec No 5424 Base No 6068	Rec. No 5897 Base No. 6068

## List Prices and Data

#### Schedule "H"

List No.	Carton	Std. Pkg.	Mfrs. List Each	W. E. List Each	List No.	Carton	Std. Pkg.	Mfrs. List Each	W. E. List Each
5424	10	50	<b>\$</b> 0.25	\$0.60	5574	10	50	\$0.30	\$0.72
5523	10	50	.30	.72	5617	10	50	.30	.72
5625	10	50	.35	.84	5618	10	50	.30	.72
5657	10	50	.45	1.08	5619	10	50	.30	.72
5700	10	50	. 55	1.32	5939	10	50	.30	.72
5897	10	50	.30	.72	6068	10	50	.30	. 72
6328	10	50	.35	.84	6095	10	50	.80	1.92
6335	10	50	.40	.96	l	D.		-oogle	
6336	10	50	.25	.60	ļ	Di	igitized by	300816	

## CONDUIT BOX, WEATHERPROOF AND FLUSH' RECEPTACLES

1324						25/5/201	COLUMN TO SERVICE
	fill	i	THE T				
No. 6283 Flush Receptacle IA" Plate Assembled	Cap No. 6918 Base No. 6283	Cap No. 6919 Base No. 6283	Cap No. 6921 Base No. 6283	Cap No. 6565 Base No. 6283	Cap No. 5419 Base No. 6283	Cap No. 5420 Base No. 6283	Cap No. 5421 Base No. 6283
	1			#	1	1	
No. 6282 Flush Receptacle . "Plate Assembled	Cap No. 6918 Base No. 6282	Cap No. 6919 Base No. 6282	Cap No. 6921 Base No. 6282	Cap No. 6565 Base No. 6282	Cap No. 5419 Base No. 6282	Cap No. 5420 Base No. 6282	Cap No. 5421 Base No. 6282
No. 6293 Comp. Weather- proof Receptacle	Cap No. 6918 Base No. 6293	Cap No. 6919 Base No. 6293	Cap · No. 6921 Base No. 6293	Cap 'No. 6565 Base 6293	Cap No. 5419 Base No. 6293	Cap No. 5420 Base No. 6293	Cap No. 5421 Base No. 6293
No. 6294 Porcelain Weather- proof Receptacle	Cap No. 6918 Base No. 6294	Cap No. 6919 Base No. 6294	Cap No. 6921 Base No. 6294	Cap No. 6565 Base No. 6294	Cap No. 5419 Base No. 6294	Cap No. 5420 Base No. 6294	Cap No. 5421 Base No. 6294
Cover Suspension			Base No. 0135		Base No. 0103	Base No. 0103	ase No. of the
No. 6103 Conduit Box Recep.	Cap No. 6918 Base No. 6103	Cap No. 6919 Base No. 6103	Cap No. 6921 Base No. 6103	Cap No. 6565 Base No. 6103	Cap No. 5419 Base No. 6103	Cap No. 5420 Base No. 6103	Cap No. 5421 Base No. 6103
Conduit Box Recep. Screws %"Centers	Base No. 5624	Base No. 5624	Base 5624	Base 5624	Base No. 5624	Base No. 5624	Base No. 5624
No. 5624	Cap No. 6918	Cap No. 6919	Cap No. 6921	Cap No. 6565	Cap No. 5419	Cap No. 5420	Cap No. 5421
	A	A			魚	魚	魚
No. 5620 Fielding Receptacle. Screws 25in Centers	Cap No. 6918 Base No. 5620	Cap No. 6919 Base No. 5620	Cap No. 6921 Base 5620	Cap No. 6565 Base 5620	Cap No. 5419 Base No. 5620	Cap No. 5420 Base No. 5620	Cap No. 5421 Base No. 5620
All other Plugs, Connectors and Receptacles 6 Amperes, 250 Volts						8 8	2 3
All Screw Base Plugs	Composition Cap Polarized	Brass Covered Composition Polarized	Composition "Knostrain" Polar	Br. Cov. Compo. "Knostrain" Polar ized	Porcelain Cap	No. 5420 Composition Cap	No. 5421 Brass Covered Porcelain Cap

			List	: Prices	and	Data		Schedul	e "H"
		Caps			1		Bases		
List No.	Carton	Std. Pkg.	Mfrs. List Each	W. E. List Each	List No.	Carton	Std. Pkg.	Mfrs. List Each	W. E. List Each
5419 5420 5421 6565	10 10 10 10	50 50 50	\$0.15 .20 .25	\$0.38 .48 .60	5620 5624 6103	10 10 10	50 50 50	\$0.30 .30 .35	\$0.72 .72 .84 2.04
6918 6919 6921	10 10 10 10	50 50 50 50	. 55 . 15 . 25 . 25	1.32 .38 .60 .60	6282 6283 6293 6294	10 10 10 10	50 50 30 30	.85 .95 .65 .50	2.28 1.56 1.20

Polished brass, brush brass, polished bronse, oxidized copper, standard finishes for brass plates. All other finishes, excepting gold and silver, add to list \$0.24. Mfrs. List \$0.10.

Brush brass shipped unless otherwise specified.
2½ inches round plate, supporting screw holes, 1½ inch on centers. Plate only, with straps, Catalog No. 5615.
3½ inch round plate, supporting screw holes, 2¼ inches on centers. Plate only, with straps, Catalog No. 5616.

Porcelain receptacle only for No. 6282 or No. 6283, Catalog No. 5614.

## CONDUIT BOX, WEATHERPROOF AND FLUSH RECEPTACLES

No. 5523 Brass Covered Composition	No. 6336 Elongated Composition	No. 5657 Br.Cov Compo. "Knostrain"	No. 5700 Br.Cov.Compo. "Knostrain"	No. 6328 Compo. Swivel "Knostrain" Bushing	No. 5625 Porc. Mult. Current Tap	No. 6335 Compo Mult. Current Tap	No. 5424 Porcelain Lamp Receptacle	No. 5897 Composition Lamp Receptacle
Cap No. 5523 Base No. 5620	Cap No 6336 Base 5620	Cap No. 5657 Base 5620	Cap No. 5700 Base 5620	Cap No. 6328 Base No. 5620	Tap No. 5625 B a 5 6 2 0	Tap No 6335 B 5 6 2 e 0	Rec. No 5424 Base No 5620	Rec. No. 5897 B 5 a 5 6 2 e 0
Cap No 5523 Base No. 5624	Cap No 6336 Base 5624	Cap No. 5657 Base 5624	Cap No 5700 Base 5624	Cap No. 6328 Base No. 5624	Tap No. 5625 B 56 s 2 e 4	Tap No. 6335 B 56 s 62 e 4	Rec. No. 5424 B 56 s 2 e 4	Rec No 5897 B 56 a 5 e 4
Cap No.5523 Base No. 6103	Cap No 6336 Base No 6103	Cap No. 5657 Base 6103	Cap No. 5700 Base No. 6103	Cap No 6328 Base No 6103	Tap No 5625 B 6 1 0 8 e 3	Tap No. 6335 B 6 a s 6 1 0 3	Rec. No. 5424 Base No. 6103	Rec. No 5897 Base No 6103
Cap No. 5523 Base No. 6294	Cap No. 6336 Base 6294	Cap No 5657 B 6 a 2 s 9 e 4	Cap No. 5700 Rase 6294	ú	Tap No. 5625 B 6 a 2 s 9 e 4	Tap No 6335 B 6 a 2 s 9 e 4	Rec. No. 5424 Base 6294	Rec. No 5897 Base 6294
Cap No. 5523 Base No. 6293	Cap No 6336 Base 6293	Cap No. 5657 Base 6293	Cap No. 5700 Base 6293	☆	Tap No 5625 Base 6293	Tap No. 6335 Base 6293	Rec. No. 5424 Base 6293	Rec. No 5897 Base 6293
Cap No. 5523 Base No. 6282	Cap No 6336 Base No 6282	Cap No. 5657 Base 6282	Cap No. 5700 Base No. 6282	Cap No. 6328 Base No. 6282	Tap No. 5625 Base No. 6282	Tap No 6335 Base No 6282	Rec. No. 5424 Base No. 6282	Rec. No 5897 Base No. 6282
Cap No. 5523 Base No. 6283	Cap No. 6336 Base No 6283	Cap No. 5657 Base No. 6283	Cap No. 5700 Base No. 6283	Cap No. 6328 Base No. 6283	Tap No. 5625 Base No. 6283	Tap No 6335 Base No. 6283	Rec. No. 5424 Base No. 6283	Rec. No. 5897 Base No. 6283
illi			14	1	illi	11		

			List	Prices	and	Data		Schedule	"H-2"
		Caps	2.00	1	ſ		Bases	3.00	
T !		64.3	Mfrs.	W. E.			04.3	Mfrs.	W. E.
LIBE	<b>-</b> .	Std.	List	List	List		Std.	List	_List
No.	Carton	Pkg.	Each	Each	No.	Carton	Pkg.	Each	Each
5424	10	50	<b>\$</b> 0.25	\$0.60	5620	10	. 50	<b>\$</b> 0.35	\$0.84
5523	10	50	.30	.72	5624	10	50	.30	.72
5625	10	50	.35	.84	6103	10	50	.35	. 84
5657	10	Bo	.45	1.08	6282	ī	50	.85	2.04
List No. 5424 5523 5625 5657 5700 5897 6328	iō	50	. 55	1.32	6283	ī	50	.95	2.28
5897	10	50	.30	.72	6293	10	50	.95	2.28
6328	10	50	.30	.72	6294	10	30	.50	. 60
6335	10	50	.40	.96				• • • •	
6336	10	50	25	80				× .	

Weatherproof plugs are designed for use out of doors, being particularly desirable for railroad roundhouses, ship-building plants—in fact any place where a plug would be subjected to all weather conditions.

All devices\_listed above, except Nos. 6282 and 6283, packed 10 to a carton.

### **FLUSH RECEPTACLES**

National Electrical Code Standard All Screw Base Plugs	No. 6918 Composition Cap Polarized	No. 6919 Brass Covered Composition Polarized	No. 6921 Composition "Knostrain" Polarized	No. 6565 Br. Cov. Compo "Knostrain" Polarized	No. 5419 Porcelain Cap	No. 5420 Composition Cap	No. 5421 Brass Covered Porcelain Cap
660 Watts, 250 Volts All other Plugs, Connectors and Receptacles 6 Amperes, 250 Volts	1						
No. 5547 Flush Receptacle	Cap No. 6918 Rec. No. 5547	Cap No. 6919 Rec. No. 5547	Cap No. 6921 Rec. No. 5547	Cap No. 6565 Rec. No. 5547	Cap No. 5419 Rec. No. 5547	Cap No. 5420 Rec. No. 5547	Cap No. 5421 Rec. No. 5547
	.0.						<b>(</b>
No. 5579 Flush Receptacle With Lift Cover	Cap No. 6918 Rec. No. 5579	Cap No. 6919 Rec. No. 5579	Cap No. 6921 Rec. No. 5579	Cap No. 6565 Rec. No. 5579	Cap No. 5419 Rec. No. 5579	Cap No. 5420 Rec. No. 5579	Cap No. 5421 Rec. No. 5579
No. 6257 Duplex Flush Receptacle	Cap No. 6918 Rec. No. 6257	Cap No. 6919 Rec. No. 6257	Cap No. 6921 Rec, No. 6257	Cap No. 6565 Rec. No. 6257	Cap No. 5419 Rec. No. 6257	Cap No 5420 Rec. No 6257	Cap No. 5421 Rec. No. 6257
	66	0	(C)				(0)

List Prices and Data	Schedule "H"
	Delicadio 11

List No.	Carton	Std. Pkg.	Mfrs. List Each	W. E. List Each	List No.	Carton	Std. Pkg.	Mfrs. List Each	W. E. List Each
5419	D	50	\$0,.15	\$0.36	5547		50	\$0.60	\$1.44
5420		50	.20	.48	5579		50	.60	1.44
5421		50	.25	.60	6257		50	.85	2.04
6565		50	.55	1.32		2012		1 122	4150
6918		50	.15	.36					
6919		50	.25	.60				100	151
6921		50	.25	.60					4

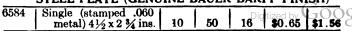
FLUSH PLATES FOR HUBBELL NO. 5547 RECEPTACLE
LISTED AROVE Schedule "H"

17.
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2.

No. 5548 No. 658\$

	LISIE	U AB	JVE		ocneau	BU
List No.	Description	Carton	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
5548	Single (stamped .060 metal) 4½ x 2¾ ins.	10	50	16	\$0.35	\$0.84
6585	Single (solid) 4½ x 2¾ inches	10	50	18	.65	1.56
5549	2 gang (stamped .060 metal) 4½ x 4 ½ ins.	1	25	13	1.00	2.40
6586	2 gang (solid) 4½x 4 % ins	1	25	15	1.30	3.12
5550	3 gang (solid) 4½ x 63 s ins	1	20	18	1.95	4.68
5599	4 gang (solid) 4½ x 8 <sub>16</sub> ins	1	10	20	2.60	6.24







No. 6584

#### FLUSH RECEPTACLES

No. 5523 Brass Covered Composition	No. 6336 Elongated Composition	No. 5657 Br.Cov.Compo. 'Knostrain' Bushing	No. 5700 Br.Cov.Compo. "Knostrain" Bushing	No. 6328 Compo. Swivel "Knostrain" Bushing	No. 5625 Porcelain Multiple Current Tap	No. 6335 Composition Multiple Current Tap	No. 5424 Porcelain Lamp Receptacle	No. 5897 Compositio Lamp Receptacle
Cap No. 5523 Rec. No. 5547	Cap No. 6336 Rec. No. 5547		Cap No. 5700 Rec. No. 5547	Cap No. 6328 Rec. No. 5547	Tap No. 5625 Rec. No. 5547	Tap No. 6335 Rec. No. 5547	Rec. No. 5424 Rec. No. 5547	Rec. No. 58 Rec. No. 55
					0			
Cap No. 5523 Rec. No. 5579	Cap No. 6336 Rec. No. 5579	Cap No. 5657 Rec. No. 5579	Cap No. 5700 Rec. No. 5579	Cap No. 6328 Rec. No. 5579			Rec. No. 5424 Rec. No. 5579	
					☆	☆		¥
Cap No. 5523 Rec. No. 6257	Cap No. 6336 Rec. No. 6257		Cap No. 5700 Rec. No. 6257	Cap No. 6328 Rec. No. 6257	Tap No. 5625 Rec. No. 6257	Tap No. 6335 Rec No. 6257	Rec. No. 5424 Rec. No. 6257	Rec. No. 58 Rec. No. 62
				0.0				0

#### Schedule "H"

List No.	Std. Pkg.	Mfrs. List Each	W. E. List Each	List No.	Std Pkg.	Mfrs. List Each	W. E. List Each
5424 5523 5547 5625	50	\$0.25	\$0.60	5897	50	\$0.30	\$0.72
5523	50	.30		6257	50		2.04
5547	50	.60	1.44	6328	50	.85 .35	. 84
5625	50 50	.35	. 84	6335	50	.40	. 96
5651	50	.45	1.08	6336	50	.25	. 84 . 96 . 60
5700	50	55	1 32	2222	7.7		

## Flush Plates for Hubbell No. 5579 Receptacles Listed Above

#### DOUBLE HINGE LIFT COVER PLATES



No. 5580

List No.	Description	Carton	Std. Pkg.	Pkg. Wgt. Lbs.	Mfrs. List Each	W. E. List Each
5580	Single(solid) 4½ x 2¾ ins	10	50	22	\$1.40	\$3.36
5581	2 gang (solid) 4 ½ x 4 ½ ins	1 1	25	18	2.80	6.72
5582	3 gang (solid) 4 ½ x 6 1/2 ins	11	20	17	4.20	10.08
5600	4 gang (solid) 4½ x 8 1 ins	1 1	10	20	5.60	13.44

#### PLATES FOR NO. 6257 DUPLEX RECEPTACLE LISTED 'ABOVE

6258	Single (stamped .060 metal)		1	ì	l I	ľ
	41/4 x 23/4 ins	10	50	15	\$0.40	\$0.96
6587	Single (solid) 4½ x 2¾ ins	10	50	16	.65	1.58
6259	2 gang (stamped .060 metal)		1	1		
	4½ x 4 %ins	1	25	12	1.30	3.12
6588	2 gang (solid) 4½ x 4 % ins	1	25	13	1.50	3.60
6260	3 gang (solid) 41/2 x 6% ins	1	20	17	2.25	5.40
6261	4 gang (solid) 4 1/2 x 8 1/4 ins	1	10	18	3.00	7.20



No. 6258 No. 6587

Outside supporting screw holes, 3 % inches on centers.
Inside supporting screw holes, 2 % inches on centers.
When an equal number of receptacles, plates and brass covered caps are ordered, caps will be furnished in the finishes standard on plates without extra charge.

#### ATTACHMENT PLUGS AND RECEPTACLES

#### For Three-wire Work—Polarized











No. 6147

No. 6055

#### Separable Attachment Plugs

660 Watts-250 Volts

Schedule "H"

List No.	Description	Carton Quantity	Pkg. Wt. Lbs.	Std. Pkg.	Mfrs. List Each	W. E. List Each
6040	With porcelain cap	10	40	100	\$0.50	\$1.20
6041	With brass covered porcelain cap	10	40	100	.60	1.44
6146	With composition cap	10	40	100	. 55	1.32
6308	With brass covered composition cap	10	40	100	. <b>65</b>	1.56
6042	Porcelain base only	10	30	100	.30	.72
6043	Porcelain cap only	10	12	50	.25	. 60
6044.	Brass covered porcelain cap	10	12	50	.35	.84
6149	Composition cap only	10	15	50	.30	.72
6150	Brass covered composition cap only	10	15	50	. 40	.96

### Composition Cord Connector

	6 Amperes—250 Volts				Sched	lule "H"
6408 6409	Cord connector Composition body only		20 15	50 50	\$0.80 .50	\$1.92 1.20

## Wall Receptacle

6 Amperes—250 Volts						Schedule "H"		
6045	With porcelain cap	10	30	50	\$0.75	\$1.80		
6046	With brass covered porcelain cap	10	30	50	.85	2.04		
6147	With composition cap	10	30	50	.80	1.92		
6309	With brass covered composition cap	10	30	50	.90	2.16		
6047	Concealed base only	10	25	50	.55	1.32		

The neutral contact blade of the three-wire cap is made slightly longer than the others and makes contact first when the plug is inserted, and holds contact until after the others are disconnected. The polarity arrangement insures proper connection at all times. Supporting screw holes 134 inches on centers.

Brush brass and polished brass are standard finishes for brass covered caps. Brush brass shipped unless otherwise specified.

For special finished brass covered caps, add \$0.12 to list. Mfrs. List \$0.05.

### 20 Ampere Wall Receptacle

20 Amperes—250 Y	Sche	dule "H"			
6055 Receptacle, with concealed base and polarized cap 6058 Polarized cap only 6059 Concealed base only	10	30 15 25	30 30 30	\$1.25 .60 .65	\$3.00 1.44 1.56

Brush brass and polished brass are standard finishes for caps; all other finishes, excepting gold and silver, add to list \$0.12. Mfrs. List \$0.05.
Supporting screw holes, 13/4 inches on centers.

Wiring Devices



#### **HUBBELL SPECIALTIES**











Separate Caps and Lamp Receptacles

	FOR LARGE TYPE POLARIZED PLUG RECEPTACLES Schedule "H"							
List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each		
5567 5553 6156	6 ampere polarized cap, porcelain, brass covered	10 10 10	30 30 30	12 15 15	\$0.50 .50 .55	\$1.20 1.20 1.32		
	20 Ampere Polarized Cap, with "Knostrain" I	Bushing						
5665 6589	Brass covered porcelain cap, for No. 10 Jumper cable	10 10	30 30	12 12	\$1.00 1.05	\$2.40 2.41		
	Lamp Receptacles for Hubbell Polarized Plug Re	eceptacle	3					
5737 5898	Porcelain lamp receptacle for 6 ampere plugs  Porcelain lamp receptacle for 20 ampere plugs	10 10	30 30	7 7	\$0.30 .35	\$0.72 .84		
	Other to 1 Cold to 6 and the second some and bound become an wallet or	1 1						

Standard finishes for brass covered caps are brush brass or polished brass.

Brush brass furnished unless otherwise specified.

All other finishes excepting gold and silver, add to list \$0.12. Mfrs. List \$0.05













No. 5699

No. 5743

No. 6821

No. 5525

No. 5526

50

1.20

## Composition Cord Connector WITH METAL COVERED "KNOSTRAIN" BUSHINGS 6 Amperes—250 Volts

Schedule "H" W.E. Pkg. Wt. Mfrs. Carton List No. Std. Description Quantity Pkg. Lbs. Each Each Connector, brass covered cap . . . 10 25 \$3.13 POLARIZED COMPOSITION CORD CONNECTOR 6 Amperes-250 Volts Polarized connector, with brass covered cap Composition body only..... 30

6278 5567 Cap only Brush brass standard finish for caps. For special finished brass covered caps, see listing elsewhere.

SMALL POLARIZED CORD CONNECTOR 6 Amperes—250 Volts

6821 Composition cord connector. 6822 Composition body only. 6918 Composition cap only.	10 10	50	15 10	\$0.50 .35 .15	\$1.20
6918 Composition cap only	10	50	8	.15	.36

Equipped with Extra Set of Binding Screws for Fuse Wire-5524 5525 Porcelain cap..... \$0.48 \$0.20 Composition cap. 10 30 25 .60

Brass covered cap, composition.

The above caps are a trifle deeper than the regular Hubbell caps.

They are made in the fusible type and designed to convert Hubbell fuseless plugs into fusible.

Standard finish for Nos. 5526 and 5527, brush brass, and polished brass.

All other finishes, except gold and silver, add to list \$0.12 when furnished separately. Mfrs, List \$0.05.

When furnished with flush receptacles, no extra charge is made for corresponding standard finish of plates.

### HUBBELL PLUGS AND RECEPTACLES











No. 5746

No. 5747

No. 5894

No. 5652

No. 6143

#### MOTOR ATTACHMENT PLUGS

•		1	 44¥ 1	[–2"
- 50	nec	u	· · F	-Z.,

50 | 25 | \$0.60 | \$1.44

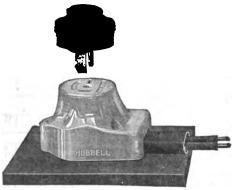
Schedule "H"

List	Description	Carton	Std.	Pkg. Wt.	Mfrs. List	W. E.
No.	10 Amperes—250 Volts	Quantity	Pkg.	Lbs.	Each	Each
5746▲	Comp. base, with strain relief bushing, porcelain cap	10	50	15	\$0.45	\$1.08
<b>5747^</b>	Comp. base, with strain relief bushing, porcelain cap	10	50	15	.95	2.28
5744 <b>^</b> 1	Porcelain cap only	10	50	10	.15	.36
<b>5894</b> ▲	Comp. base, composition cap	10	50	15	.50	1.20
5895 <b>^</b>	Comp. base, with strain relief bushing, comp. cap	10	50	20	1.00	2.40
5896 <b>^</b>	Composition cap only	10	50	10	.20	.48
6069	Porcelain base, porcelain cap	10	50	15	.40	.96
6087	Porcelain base only	10	50	10	.25	.60
5574	Composition base only	• 10	50	10	.30	.72
6095	Composition base only with strain relief	10	50	15	.80	1.92
•	POLARIZED MOTOR PLUG	3				
6277	Composition polarized motor plug, 10 amperes, 250 volts.	10	30	15	\$0.80	\$1.92
6278	Composition base only	10	30	15	.50	1.20
6279	Composition cap, with knife blade contact	10_	30	15	.30	. 72
	REVERSE ATTACHMENT PLU	JGS		Scl	hedule '	"H-2"
5652	Composition attachment plug, 10 amp.—250 v	10	50	20	\$0.75	\$1.80
6098	Composition base only with enclosed terminals	10	50	15	.45	1.08
6099	Composition cap with knife blade contacts	10	50	10	30	. 72
	REVERSE MOTOR PLUG-With Strain R	elief Bu	shing	Sc	hedule '	'H-2"

6143 | Reverse motor plug, all composition, 10 amp.—250 v... | 10 | 50 | Screw holes for attaching the base to apparatus are spaced  $1\frac{2}{3}$  inches on centers. The diameter of base is  $2\frac{1}{3}$  inches. Height over all,  $2\frac{3}{3}$  inches.

# 20 AMPERE WALL RECEPTACLES FOR NATIONAL METAL MOULDING 20 Amperes—250 Volts

#### WITH ONE-WAY BASE



No. 6090

List No.	Description	Car- ton	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
6090	With brass covered cap, polarized	10	30	20	\$1.00	\$2.40
6091 5553	Base only Brass covered cap	10	30	15	. 50	1.20
	only, polarized	10	30	10	.50	1.20

#### WITH TWO-WAY BASE

6093	With brass covered cap, polarized Base only	10 10	30 30	20 15	\$1.00 .50	\$2.40 1.20
5553	Brass covered cap only, polarized	10	30	10	.50	1.20

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# HUBBELL WALL RECEPTACLES Porcelain Wall Receptacles







No. 5557 Polarity Wall Receptacle



No. 5605 Polarity Condulet Receptacle





No. 5726 Polarity Wall Receptacle

#### POLARITY WALL RECEPTACLES

10 Amperes—250 Volts

Schedule "H-2"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
5882	Receptacle, concealed base		30		\$0.75	\$1.80
<b>5</b> 883	Receptacle, cleat base	10	30	17		1.80
<b>5884</b>	Receptacle, molding base	10	30	17	.75	
<b>5</b> 567	Cap only	l 10 l	30	12	. 50	1.20
5885	Base only, for concealed type	10	30	9	.30	.72
<b>5886</b>	Base only, for cleat type	10	30	10	.30	
5887	Base only, for molding type	10	30	10	.30	. 72

Old brass standard finish for cap. All other finishes add to W. E. List \$0.09, to Mfrs. List \$0.05.

	20 Amperes—250 Volts			Schedule "H-2"			
5557▲	Concealed base, screw holes 1% inches on centers	10	30	25	\$1.00  \$2.40		
<b>5</b> 558 <b>▲</b>	Cleat base, screw holes, 1 1 inches on centers	10	30	25	1.00 2.40		
<b>5</b> 559 <b>▲</b>	Molding base, screw holes 1½ inches on centers	10	30	25	1.00 2.40		
5553▲	Cap only	10	25	10	.50 1.20		
<b>5621</b> ▲	Base only, for concealed type	10	30	18	.50 1.20		
5622▲	Base only, for cleat type	10	30	18	.50 1.20		
5623▲	Base only, for molding type	10	30	18	.50 1.20		

Brush brass standard finish for cap. All other finishes add to W.E. List \$0.09, to Mfrs. List \$0.05.

#### POLARITY CONDULET RECEPTACLES

	20 Amperes—250 Volts			Sch	edule "H-2"
5605 5757 5553▲	Polarity receptacle, brass covered cap. Polarity receptacle, base only	10 10 10	25 25 25 25	20 15 10	\$1.00 \$2.40 .50 1.20 .50 1.20

Supporting screw holes 5% inch on centers.

Brush brass standard finish for cap. All other finishes add to W. E. List \$0.09, to Mfrs. List \$0.05.

## POLARITY WALL RECEPTACLES With Split Bushing Strain Relief for No. 10 Jumper Cable

With Split Bushing Strain Relief for No. 10 Jumper Cable 20 Amperes—250 Volts

5726▲	Concealed base, screw holes 176 inches on centers		30	32	\$1.50  \$3.60
5727▲	Cleat base, screw holes 1 1 inches on centers	10	30	32	1.50 3.60
5728▲	Molding base, screw holes 1½ inches on centers		30	32	1.50 3.60
5665▲	Cap only, polished brass	10	25	12	1.00 2.40
<b>5621</b> ▲	Base only, concealed	10	30	18	.50 1.20
5622▲	Base only, cleat	10	30	18	.50 1.20
_5623▲	Base only, molding	10	30	18	50 1.20

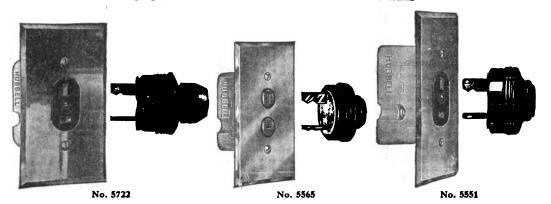
Standard finish for caps polished and brush brass. All other finishes add to list \$0.12, Mfrs. List \$0.05 For special finish brass covered caps see data elsewhere.

\*National Electrical Code Standard.\*

\*National Electrical Code Standard.\*

Schedule "H-2"

#### **HUBBELL FLUSH RECEPTACLES**



### Polarity Flush Receptacles

20 Amperes-250 Volts

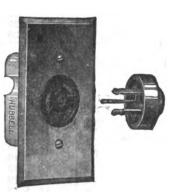
				S	chedule	"H-3"
List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E List Each
*5722 <sup>*</sup> *5551 <sup>*</sup> 5552 <sup>*</sup> 5553 <sup>*</sup> 5554 <sup>*</sup> 5556 <sup>*</sup> 5556 <sup>*</sup> 5586 <sup>*</sup>	Complete with cap and 4½ x 2¾ inch plate Complete with cap and 4½ x 2¾ inch plate Receptacle only. Cap only. Schedule H-2. Single gang plate, 4½ x 2¾ inches. Two gang plate, 4½ x 4¼ inches. Three gang plate, 4½ x 6¼ inches. Four gang plate, 4½ x 6¼ inches. Four gang plate, 4½ x 8¼ inches.	1	25 25 25 25 25 25 15 10	32 32 17 10 10 10	\$2.50 2.00 .75 .50 .75 1.50 2.25 8.00	\$6.00 4.80 1.00 1.20 1.80 3.60 8.40 7.20

## Polarity Flush Receptacles

	10 Amperes—250 Volts			Schedule "H–3"				
*5565* 5566* 5567* 5568* 5569*	Complete with cap and 4½ x 2¾ inch plate.  Receptacle only. Cap only. Single gang plate, 4½ x 2¾ inches. Two gang plate, 4½ x 4¼ inches. Three gang plate, 4½ x 4¼ inches.	10 10 10 10 1	50 50 30 50 25	60 30 12 22 18	\$1.75 .60 .50 .65 1.30	\$4.20 1.44 1.20 1.56 3.12 4.68		
5587*	Four gang plate, 41/2 x 8 % inches	1	10	14	2.60	6.24		

Outside supporting screw holes, 3 Å inches on centers. Inside supporting screw holes, 2 ¼ inches on centers.

## Flush Receptacles

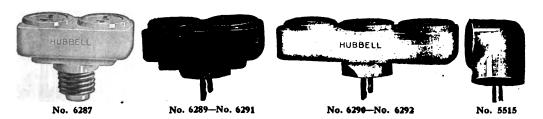


No. 6049

6 Amperes, 25	0 Volts Wi	thout Lift Cover. For Th	ree-Wire	Work	S	chedule	"H-3"
	6049	Receptacle, complete, with		1	1		<u> </u>
		plate and porcelain cap.	•	60	50	\$1.55	\$3.72
	6050	Receptacle, complete, with			ļ	l	1
		plate and brass covered porcelain cap		60	50	1.65	3.96
	6148	Receptacle, complete, with	•	J 047	30	1.00	3.30
	0110	plate and composition		1	ŀ	Į.	l
		cap	•	60	50	1.60	3.84
	6310	Receptacle, complete, with		i	l	1	l
		plate and brass covered	_	۱			۰
		_ compostion cap		60	50	1.70	4.08
100	6051	Porcelain receptacle only.	10	35	50	.95	2.28
	5548	Single (.060 stamped metal)		1	i i	i	
The state of the s		41/2 x 21/4 inches	10	16	50	.35	.84
MAD IN	6585	Single (solid) 41/4 x 23/4 in.	10	18	50	.65	1.56
THE RESERVE TO SERVE	5549	Two-gang (.060 stamped		1	1	1	
1000		metal) 41/2 x 4 1 inches	1	13	25	f1.00	2.40
	6586	Two gang (solid) 4 1/2 x 4 1/8	_	1		1	
-		inches	1	15	25	11.30	3.12
	5550	Three gang(solid) 4 1/2 x 6 3/4	-	••		1	1
		inches	1	18	20	†1.95	4.68
	5599	Four gang (solid) 41/4 x 8 ft	-	1 -0		1 12.00	1
		inches	1	20	10	1 t2.60	6.24
		STEEL PLATE (GENUIN	E BAUEI		<del></del>		
	6584	Single(.060 stamped metal)		1		T	
	3002	4 % x 4 % inches	10	1 16	50	\$1.56	\$0.65

Outside supporting screw holes 3 M inches on centers. Inside supporting screw holes 2 M inches on centers. Centeral brush brass, polished bronse and oxidized copper are standard finishes for brass flush plates: "All other finishes, excepting gold and silver, add to list, per gang, \$0.24. Mfrs. List \$0.10.

#### ATTACHMENT PLUGS AND RECEPTACLES



## Multiple Attachment Plugs

#### WITH MEDIUM SCREW BASE

660 Watts—250 Volts					Schedul	le "H"
List No.	Description	Carton	Pkg. Wt. Lbs.	Std. Pkg.	Mfrs. List Each	W. E. List Each
6287 6288	Multiple plug, screw base, two outlets, less caps Multiple plug, screw base, three outlets, less caps	5 5	10 15	10 10	\$0.70 1.05	\$1.68 2.41

#### WITH KNIFE-BLADE CONTACTS

6 Amperes-250 Volts

## FOR USE WITH ALL HUBBELL RECEPTACLES, EXCEPTING FLUSH RECEPTACLES HAVING LIFT COVER

6289 Multiple plug, knife-blade base, two outlets, less caps	5	15	10	\$0.70	\$1.68

## FOR USE ONLY WITH RECEPTACLES HAVING LIFT COVER No. 5579 Type

6291 | Multiple plug, knife-blade base, two outlets, less caps. . | 5 | 10 | 10 | \$0.70 | \$1.68

## FOR USE WITH ALL RECEPTACLES, EXCEPTING FLUSH RECEPTACLES HAVING LIFT COVER

6290 | Multiple plug, knife-blade base, three outlets, less caps. | 5 | 15 | 10 | \$1.05 | \$2.41

#### FOR USE ONLY WITH FLUSH RECEPTACLES HAVING LIFT COVER, No. 5579 TYPE

6292   Multiple plug, knife-blade base, three outlets, less caps.	5	15	10	<b>\$</b> 1.05	\$2.41
---	---	----	----	----------------	--------

Interchangeable caps for multiple attachment plugs are listed elsewhere.

#### Angle Lamp Receptacle

660 Watts-250 Volts

Schedule "H"

List No.	Description	Carton	Pkg. Wt. Lbs.	Std. Pkg.	Mfrs. List Each	W. E. List Each
5515	Porcelain angle receptacle	10	12	50	\$0.40	. \$0.96

Designed for show case and window lighting.

Made to fit any Hubbell Standard plug base, wall or flush receptacle.

The easy manner in which a lamp can be inserted and the cap connected or disconnected, is a feature of merit and economy.

#### SIGNALITES AND CURRENT TAPS











Polarized "Signalite" "Signalite"

#### Signalites FOR HUBBELL PLUGS AND RECEPTACLES

6 Amperes, 125 Volts

With Standard Knife-Blade Contacts Schedule "H"

List No.	Description	Carton Qntv.	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
6108	"Signalite" without lamp	10	30	12	\$0.55	\$1.32
6109	"Signalite" complete with lamp	10	30	12	.95	2.28
6311	"Signalite" without lamp, but with No. 5607 porcelain base.	10	30	15	.70	1.68
6312	"Signalite" complete with lamp and No. 5607 porcelain base	10	30	20	1.10	2.64
6313	"Signalite" without lamp, but with No. 5612 composition base	10	30	15	.75	1.80
6314	"Signalite" complete with lamp and No. 5612 composition base	10	30	20	1.15	2.76

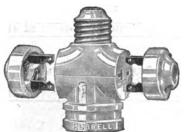
#### WITH SMALL POLARIZED KNIFE-BLADE CONTACTS

6110	"Signalite" without lamp	10	T 3	0	12	\$0.55	
6111	"Signalite" complete with lamp	10	1 3	0	12		2.28
6315	"Signalite" without lamp, but with No. 6917 composition base		1 3	0	15	.70	1.68
6316	"Signalite" complete with lamp and No. 6917 composition base	l 10	3	0	15	1.10	2.64

"Signalites" are suitable for use with all electrically heated devices of 6 amperes, 125 volts or less.

Each plug is supplied with an electro-welded lamp guard to protect the lamp from breakage. "Signalites" are supplied with red lamps.

All brass parts are nickel-plated. Equipped with either standard Hubbell knife-blade contacts, or small polarized type, and are interchangeable with the entire line of Hubbell Attachment Plugs.



Nu. 6.53



No. 5736



No. 5626

Schodule "H"

## **Double Outlet Current Tap**

MULTIPLE—PORCELAIN SEO Watte 250 Valte

	OOO Watts, 250 Voits			-	Cilculit	,
List No.	Description	Carton Qnty.	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
6553 6554	Current tap with two No. 5419 porcelain caps	10 10	50 50	30 20	<b>\$</b> 0.80 .50	\$1.92 1.20

	SERIES CURRENT TAPS				
5653	Without shade holder groove	10	50	25   \$0.50	\$1.20
5736	With shade holder groove	10	50_	<b>6.50 1.50 1.50 1.50 1.50 1.50</b>	1.20
5626	Without shade holder groove.  With shade holder groove.  Lamp receptacle current tap, side wire outlet	Pigtoe	10y <b>50</b>	15 .35	.84

## MISCELLANEOUS SOCKET FITTINGS







No. 5767

No. 6580



No. 5748







Showing Casing Attached

No. 6566

No. 6555

No. 5380 Full size

#### Rubber Casing and Ring FOR ATTACHMENT PLUGS

Schedule "H"

This casing is designed to protect the porcelain cap of No. 5406 separable attachment plug. It is made of soft rubber and is easily and quickly sprung in place.

The top of the casing grips the cord very tightly, and by adjusting No. 5589 rubber ring as illustrated, an absolutely weatherproof plug is the result.

List No.	<b>Descr</b> iption	Carton	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. Li <b>st</b> Each	W. E. List Each
55°3 5589	Rubber casing for attachment plugs	*	30 30	5 1	<b>\$</b> 0.30 .05	\$0.72 .12

"Knostrain" and One-piece Composition Bushings

Schedule "F"

_		i	۵.,	Pkg.	Mfrs.	W. E.
List			Std.	Wt.	List	List
No.	Description	Carton	Pkg.	Lbs.	per 1000	per 1000
5380	1/8 in. socket bushing	<b>!</b> *	1000	3	\$5.50	\$13.20
5381	3/8 in. socket bushing	*	1000	10	14.50	34.80
5748	3/2 in. "Knostrain" split bushing	*	1000	11	39.00	93.60
5767	Rosette bushing	*	1000	12	26.00	<b>62</b> . <b>40</b>
6555	3/8 in. Crown Top "Knostrain" split bushing	*	1000	11	39.00	93.60
6566	"Knostrain" split bushing for armored cord	*	1000	4	25.00	60.00
6580	"Knostrain" split bushing for reinforced cord	*•	1000	4	25.00	60.00

Bushing No. 5748 is designed especially for use on sockets. For a strain relief bushing on plug caps we recommend the use of No. 6555. The crown design of this bushing readily lends itself for use as a handle for withdrawing the plug cap from the receptacle.

\*In bulk.





No. 3632



No. 3634



No. 3637 Schedule "H"

## Socket Handles

List		Std.	Mfrs. List	W. E. List
No.	Description	Pkg.	Each	Each
1240	With $\frac{1}{8}$ in. nipple and $\frac{9}{32}$ in. hole for No. 16 approved lamp cord	100	\$0.15	\$0.36
1388	With 3/8 in. nipple and 1/2 in. hole for No. 16 approved lamp cord	100	. 15	.36

### Socket Bushings

List No.	Description	Mfrs. List Each	W. E. List Each
3630 3631	1/8 in. genuine hard rubber		\$0.36 .36
3632	½ in. genuine hard rubber	.15	.36
3634 3637	in. genuine hard rubber.	15	.36
3688	in. composition. Digitized by	18:15	.36

## P & S INTERCHANGEABLE WIRING DEVICES

•		P	UTO PARTS			
FLUTO Parts	Part S18 S P Key Socket	Part 806 8. P. Shurlok Key Bocket	Part 819 D. P. Key Socket	Part 829 D. P. Shurlok Key Bocket	Part 890 660 Watts Socket	Part 630 600 Watt Shurlok Key Socket
1						
Part CA H Cap	89480 CA-818 B Std Pkg 800	89480 CA-828 L 8t/1 Pkg 100	100421 CA-819 B Btd Pkg 800	100421 CA-629 L Rid Plug 100	900 CA-830 B Bld Pkg 500	CA-830 CA-830 End. Pig
Part CB N Cap	7800 CB-818 B Bid Pkg 250	7500 CB-829 U Fid Pkg	CB-819 B B Aid Pkg	CB-839 CB-839 Did Plug	OB-830 CB-830 Bid. Pkg	CB-630 CB
Part CO N Chp	OSMAN CC-818 B 844 Pkg 250	884AII CC-928 U Brd Plus 100	100423 CC-819 B 8td Pkg 250	1004133 CC-4870 D Bud Plug	618 CC-890 B B 844 Plug 250	613 00-630 OL 03-844 Pkg.
Part CD Nº Male Cup	88484 CD-618 B Std Pkg 250	80404 CD-828 LD-828 Std Pkg	306 CD-519 B Std Plug 250	2008 CD-829 CD-829 Std. Pkg	616 CD-890 B 84d Phg 350	CD-830 CD-830 L Sud Phg
Part CE N° Flature Cap	7846 CE-818 B 8 814. Phg 230	7544 CE-828 U Std Pkg	OE-RIP DE RIG Pice 250	543 CE-839 L L 000 Pks	0.50 CE-520 B 94d Phg 250	0400 CE-6300 L
Peri CF N° Fixture Cap	7848 CF-818 B Rid Pkg 230	7848 CF-828 L Bld Pkg	646 CY-S19 B Blud Plug 250	Std Pkg	081 CF-890 B 81d Pkg	OF-S30 CF-S30 Disk Phs
Part CO N * Angle Cap	7500 CG-818 B 8td Fkg	7500 CG-828 L Std Pkg	474 CO-819 B 94d Pkg	674 CO-829 I. I. I. I. I. I. I. I. I. I. I. I. I.	634 CG-520 B 84d Plus	CO-RIO CO-RIO L Diskd Pine
Part CH K * Angle Cap	7500 CH-S18 B S1d Pkg	7503 CH-928 L Std Pkg	877 CH-819 B Std Pkg	578 CH-529 CH-529 Rtd Pkg	628 CH-820 B Sid Plug	CH-830 CH-830 L Bud Pkg
			L	L	L	

NOTE: When ordering from columns 2, 4 and 6; add Shyrlok, to the trade numbers.

NOTE: Any brass shell single or double pole key socket or receptacle shown in this catalog may be supplied with the Brass Key.

List No.	Sched- ule		Std. P <b>kg</b> .		W. E. List Each	List	Sched- ule		Std. Pkg.	Mfrs. List Each	W. E. List Each	List No.	Sched- ule		Std. Pkg.		W. E. List Each
CA CB CC CC CC CC CC CC CC CC CC CC CC CC	ингтимингтимимимими	25555555555555555555555555555555555555	500 100 250 100 100 100 500 500 100 100 250 250 100 100 250	. 16 . 13 . 16 . 13 . 16 . 12 . 21 . 26 . 29 . 53 . 53 . 56 . 42 . 45 . 69 . 69	.38 .31 .38 .39 .50 .62 .70 1.27 1.34 1.00 1.06 1.65 1.73	CC-S28 CC-S29 CC-S30 CD-S18 CD-S19 CD-S20 CD-S29 CD-S29 CD-S30 CE-S18 CE-S19 CE-S20		25555555555555555555555555555555555555	250 250 100 100 250 250 250 250 250 100 250 250 250 250 250 250 100	\$0.39 .42 .66 .69 .42 .42 .45 .69 .39 .39 .39 .42 .66 .66 .69	1.00 1.58 1.58 1.68 1.00 1.00 1.08 1.86 1.73 .94 94 1.90 1.58 1.58	CF-829 CF-830 CG-818 CG-819 CG-829 CG-829 CG-830 CH-816 CH-819 CH-828 CH-829 CH-828 CH-829 CH-830 S-18 S-29 S-28 S-29 by		25 25 25 25 25 25 25 25 25 25 25 25 25 2	100 100 100 100 100 100 100 100 100 500 5	\$0.69 .72 .388 .411 .655 .688 .47 .47 .74 .74 .74 .74 .26 .29 .53	\$1.86 1.73 .91 .95 1.32 1.63 1.13 1.13 1.20 1.77 1.77 1.87 .62 .62 .1.27 1.27

## P & S Interchangeable Wiring Devices

			FLUTO PA				
Part 821 Keytess Socket	Part 831 Keyless Socket Shurlok	Part *822 Pull Socket	Part *833 Pull  Secket  Shurlok	Celling Pull Pull Switch	Fixtor Switch	Part 824 Pull Switch Rosette	Part 828. Fluto Rosette
59482 CA-821 B Std. Pkg.	59489 CA-831 L Sid. Pkg.	CA-822 B Std. Pkg.	90 CA-832 L Std. Pkg.	3003 CA-S23 XA Std. Pkg.	3030 CA-837 XA Std. Pkg. 50	725 CA-S24 4 XA 1 Std. Pkg.	CA-S25 XA Std. Pk
7510 CB-821 B 8td. Pkg.	7510 CB-831 L Std. Pkg.	120 CB-822 B Std. Pkg.	130 CB-S32 L Std. Pkg.	3004 CB-823 XA Std. Pkg.	3031 CB-837 XA Std. Pkg.	726 CB-824 X X X Std. Pkg.	CB-825 XA 8td. Pi
59483 CC-821 B 8td. Pkg.	50483 CC-831 L 8td. Pkg.	91 CCC-822 B 8td. Pkg.	91 CC-832 L Std. Pkg.	3005 CC-823 X A Std. Pkg.	3032 CC-837 XA Std. Pkg.	727 CCC-824 X X X X 20 Std. Pkg.	CC-824 XA Std. Pi
89485 CD-821 B 8td. Pkg.	50485 CD-831 L 8td. Pkg.	310 CD-822 B 8td, Pkg.	310 CD-832 L Std. Pkg.	3007 CD-823 XA Std. Pkg.	3033 CD-837 XA Std. Pkg.	729 CD-824 X XA Std. Pkg.	CD-82 XA Std. P
7547 CE-S21 B Std. Pkg 250	7547 CE-831 L Std. Pkg.	545 CE-S22 B Std. Pkg.	545 CR-S32 L Std. Pkg.	CE-823 XA Std. Pkg.	3034 CE-837 XA Std. Pkg.	CE-824 X Std. Pkg.	CE-82. XA Std. P
7549 CF-S21 B 8td. Pkg.	7549 CF-831 L 8td. Pkg.	548 CF-822 B Std. Pkg.	548 CF-832 L Std. Pkg.	CF-823 XA Std. Pkg.	3035 CF-837 XA 8td. Pkg.	CF-S24 5 Std. Pkg.	CF-824 XA Std. Pi
7501 GG-821 B Std. Pkg	7501 CG-831 L Btd, Pkg 100	476 CG-822 B Std. Pkg.	476 CO-832 L Std. Pkg.	CG-823 XA Std. Pkg.	3036 CG-937 XA Std. Pkg.	CG-824 XA 8td. Pkg.	CG-82 XA Std Pi
7504 CH-S21 B 8td. Pkg.	7504 CH-831 L Std. Pkg.	507 CH-822 B 8 8td. Pkg.	507 CH-832 L 8td. Pkg.	CH-823 XA Std. Pkg.	3037 CH-837 XA 8td. Pkg.	CH-S24 XA Std. Pkg.	CH-82 XA Std. P

NOTE: When ordering from columns 2 and 4; add Sharlok, to the trade numbers.

\*NOTE: Parts "\$22" and "\$32" are furnished with 8-inch chain, unless otherwise specified in your orders.

List No.	Sched- ule	Car- ton	Std. Pkg.	Mfrs. List Each	W. E. List Each	List	Sched- ule		Std. Pkg.	Mfrs. List Each	W. E. List Each		Sched- ule		Std. Pkg.	Mfrs. List Each	W. E. List Each
No.  CA-821 CA-822 CA-824 CA-825 CA-831 CA-837 CB-822 CB-823 CB-823 CB-824 CB-825	B B XA XA L L XA B B XA XA	25 25 10 10 25 25 10 25 10 25 10	500 250 50 20 20 100 100 50 250 100 20 20	\$0.30 .60 .60 .60 .20 .57 .87 .75 .39 .69 .69	\$0.72 1.44 1.44 1.44 1.37 2.09 1.80 94 1.66 1.66	CD-S21 CD-S22 CD-S23 CD-S24 CD-S25 CD-S31 CD-S32 CD-S37 CE-S21 CE-S22 CE-S23 CE-S23 CE-S23 CE-S24	B B XA XA XA L L XA B B XA XA	25 25 10 10  25 25 10 25 25 	250 100 20 20 100 100 250 100 250 20 20 20	\$0.39 .69 .69 .29 .66 .96 .84 .36 .66 .66	\$0.94 1.66 1.66 1.66 .70 1.58 2.30 2.02 .86 1.58 1.58 1.58	CG-S21 CG-S22 CG-S23 CG-S24 CG-S25 CG-S31 CG-S37 CH-S21 CH-S22 CH-S22 CH-S24 CH-S24	B B XA XA XA L L XA B B L XA	25 25  25 25 10 25 25 	100 50 20 20 20 100 50 20 100 50 50 20 20	\$0.35 .65 .65 .65 .25 .62 .92 .80 .44 .74 .74	\$0.84 1.56 1.56 1.56 60 1.49 2.01 1.92 1.06 1.78 1.78 1.78
CB-831 CB-832 CB-837 CC-821 CC-823 CC-824 CC-825 CC-831 CC-832 CC-837	L XA B B XA XA XA L L XA	25 25 10 25 25 10 10 10 25 25 10	100 100 20 250 100 20 20 100 100 20	.66 .96 .84 .36 .66 .66 .66 .26 .63	1.58 2.30 2.02 	CE-831 CE-832 CE-837 CF-821 CF-822 CF-823 CF-824 CF-831 CF-831 CF-832 CF-837	L XA B B XA XA XA L L XA	25 25 10 25 25 25  25 25 10	100 100 20 250 100 20 20 100 100 20	.63 .93 .81 .39 .69 .69 .29 .66	1.51 2.23 1.94 .94 1.66 1.66 1.66 .70 1.58 2.23	CH-S31 CH-S32 CH-S37 S-21 S-22 S-23 S-24 S-24 S-25 S-31 d by S-32 d by S-37	L XA B L B XA XA L XA	25 25 10 	100 50 20 500 100 250 50 100 100	.71 1.01 .89 .23 .53 .53 .53 .13 .50	1 70 2 42 2 14 55 1 27 1 27 1 27 1 31 1 20 1 92 1 63

## P & S INTERCHANGEABLE WIRING DEVICES

		F	LUTO PARTS	) <u>.</u>		
P = -	Part 818 S. P. Koy Socket	Part 828 8, P. Shurlok Key Soeket	Part 819 D. P. Key Socket	Part 839 D P Shurlok Key Socket	Part 836 660 Watts Socket	Part 800; 600 Wata Shurlok Key Socket
FLUTO Parts	8.					<b>3</b> *
Part CI, K * Angle Cap	7306 CI-618 B Btd. Phg.	7506 C1-838 L W 844. Pkg	CI-819 Bld. Pkg	CI-839 CI-839 Ed. Plus.	C1-820 D B 84d. Pkg.	C1-530 C1-530 Sad. Plag.
Part CJ K' Angle Fistare Cap	7880 CJ-818 Q B And. Pkg	7880 CJ-923 L 0 8td. Pkg	240 CJ-519 © 84. Pkg.	549 CJ-829 Q L 81d. Pkg	652 CJ-820 B 81d. Pkg	GI-630 CI-630 End. Ping.
Part CK y Angle Fixture Cap	7443 7445 76K-818 8 84d. Pkg.	7843 CK-528 L Std. Pkg	### Bid. Pkg	240 CK-829 D L 984. Pkg.	CK-830 B Bdd. Pkg.	one CEK-son Lind Ples
Part CL Proodest Cap	80486 C1-818 B 844. Pkg.	Sector CL-828 L M Std. Pkg.	100425 CL-819 B 844. Pkg.	100196 CL-829 Ø L 84d. Pkg.	614 CL-830 B 844. Plug.	614 CL-630 CL-630 Find. Ping.
Part CM Strata Roller ,Cap	CM-818 B 81d. Pkg.	70 CM-838 (7) 844. Pkg.	CM-819 B B 844. Pkg. 500	CM-839 U Std. Pkg.	CM-830 B Bed. Pkg.	CM-800 0 644 Phg.
Part BA Cleat	7834 BA-818 B B B14. Pkg.	7834 BA-628 BM. Pkg.	7834 BA-819 B 844. Pkg. 250	7834 PART BA-829 L 00 Std. Pkg.	818 8A-830 B 84d. Pleg.	Page 160 Page 160
Part BB Stotted Base	139 BB-818 B W 844. Pkg. 250	132 BB-638 L U G Std. Ptg.	132 BB-819 B 844. Pkg.	133 BB-839 L 100 100	ens 199-430 3 3 3 Sed. Pkg.	918-800 BB-800 Bad. Phg.
Part BC Small Concealed Base	41287 BC-818 B Rid. Pkg. 250	61287 BC-828 D Std. Pkg	61387 BC-819 B B Std. Pkg.	61207 BC-629 L 3 Std. Pkg.	617 BC-820 B B 614. Pkg.	617 BC-630 Bc-630 Sad. Phg.

NOTE: When ordering from columns 2, 4 and 6; add Shyrlok, to the trade numbers.

NOTE: The single pole receptacles on this page have been given the same trade number as the double pole receptacles, therefore it will be necessary for you to use the Part Designation if you desire a particular type.

List No.	Sched-	Car- ton	Std. Pkg.	Mfrs. List Each	W E. List Each		Sched-	Car-	Std. Pkg.	Mfrs. List Each	W. E. List Each	List	Sched- ule	Car-	Std. Pkg.		W.E. List Each
BA BB	B	10 10	100	\$0.23 .18	.43	BC-S19 BC-S20	B B	10 10		\$0.44 .47		CK -S29 CK -S30	L	25 25	100 100	\$0.74 .77	\$1.78 1.85
BC CI	B	10 25	250 50	.18	.43	BC-S28 BC-S29	ŗ	10 10	100 100	.71 .71	1.70	CL -S18 CL -S19	B B	25 25	500 500	.33	.79
CJ CK CL	B B B B B B	25 25 25	50 50 500	. 18 .21 .07	.50	BC-S30 CI -818 CI -S19	L B B	10 25 25	100 100 100	.74 .44 .44	1.08	CL -S20 CL -S28 CL -S29	B L L	25 25 25	500 100 100	.36 .60 .60	1.44 1.44
CM . BA-818	B	25 10	500 250	.07	16 1.18	CI -S20 CI -S28	L B	25 25	100 100	.47 .71	1.13	CL -830 CM-818	L B	25	100 500	.63	1.51 .79
BA-S19 BA-S20 BA-S28	B B L	10 10 10	250 250 100	.49 .52 .76	1.24	CI -S29 CI -S30 CJ -S18	L L B	25 25 25	100 100 100	.71 .74 .44	1.78	CM-S19 CM-S20 CM-S28	B B L		500 500 100	.33 .36 .60	.79 .66 1.44
BA-S29 BA-S30	L	10 10	100 100	.76 .79	1.82 1.90	CJ -S19 CJ -S20	B	25 25	100	.44	1.06 1.13	CM-S29 CM-S30	L		100 100	.60 .63	1.44
BB-S18 BB-S19 BB-S20	B B B	10 10 10	250 250 250	.44 .47 .47	1.08	CJ -828 CJ -829 CJ -830	L	25 25 25	100 100 100	.71 .71 .74	1.70	818 819 820	B B B	••	500 500 500	.26 .26 .29	.62 .62 .70
BB-S28 BB-S29	L	10 10	100 100	.71 .71	1.70 1.70	CK-S18 CK-S19	B	25 25	100 100	.47 .47	1.13 1.13	\$28 \$29ed by	ĠO	09	100	.53 .53	1.27
BB-830 BC-818	L B	10 10	100 250	.74		CK-S20 CK-S28	B	25 25	100 100	.50 .74	1.78	830	"	•••	100	56	1.34

							υΤο P								`
Pa	rt 821		rs 631 .	Par	t *522		1 • <b>833</b> 1 u li		rt 823 - 1	ı	n 837 Tato		ull	Pau	n 895
K 5	ey loss ock et	86	ey less ocket nurlok	80	Pull	i So	ckee arlok		eiling Puli witch	Plytai	a dy lich	I Sw	uitch sitch	Re	luto ,
	7507 CI-821 B Std. Pkg 100		7507 CI-831 L Std. Pkg 100		482 CI-822 B 81d. Pkg. 50		482 CI-832 L 81d. Pkg. 80		CI-823 XA 84d. Pkg 20		3042 CI-837 XA 8td. Pkg 20	Ģ	CI-824 XA 8td. Pkg 20		CI-825 XA Std. Pkg. 20
	7851 CJ-821 B 8td. Pkg. 100		7551 CJ-831 L Bid. Pkg. 100		553 CJ-822 B 8td. r*kg: 50		853 CJ-832 L Bid. Pkg 50		CJ-823 XA 8td. Pkg. 20		8038 CJ-837 XA 814 Pkg 20	d,	CJ-824 XA 81d. Pkg 20	8	CJ-825 XA 81d. Picg.
	7843 CK-821 B 81d.Pkg. 100		7853 CK-831 L Std. Pkg. 100		554 CK-823 B Std. Pkg 50		854 CK-839 L 8td. Pkg 50		CK-823 XA Sid Pkg 20		\$009 CK-837 XA 8id. Pkg 20	o d	CK-824 XA 8td. Pkg 20	$\theta$	CK-825 XA Std. Pkg. 20
	89487 CL-931 B 84d. Pkg. 500		80487 CL-831 L 81d. Pkg 100		92 CL-922 B 8td. Pkg 250		97 CL-832 L 814. Pkg 100		3008 CL-823 XA 81d. Pkg. 20		2040 CL-837 XA 84d. Pkg 20	Ģ	738 CL-824 XA 814. Pkg. 20	0	CL-825 XA Std. Pkg. 20
	CM-821 B 8td. Pkg. 800		CM-831 L 81d. Pkg. 100		CM-822 B 81d. Pkg. 250		CM-832 L 81d. Pkg. 100		CM-823 XA 81d. Pkg. 20		8041 CM-837 XA 81d. Pkg 20	Ģ	CM-824 XA 81d. Pkg. 20		CM-25 XA Sad. Plog. 20
	7885 BA-821 B 8td. Pkg. 250		7835 BA-831 L Std. Pkg. 100	Δĵ	4536 BA-822 B 8td. Pkg. 100		4535 BA-832 L Std. Pkg. 100	Ţ	3013 BA-823 XA Bid. Pkg. 20		BA-837 XA Std. Pkg. 90	Ţ	706 BA-824 XA 81d. Pkg. 20	U	718 BA-825 XA 81d. Phy. 20
T	146 BB-821 B 814. Pkg 280	Ē	146 BB-831 L Std. Pkg. 100		129 BB-522 B Sud. Pkg. 100		199 BB-832 L Std. Pkg. 100	7	3009 BB-823 XA 814. Pkg. 90	7	BB-837 XA 814. Pkg. 20	₽į	707 BB-824 XA 81d. Pkg. 20	T	716 BB-835 XA 84d. Pkg. 20
T	eces7 BC-621 B 84d. Pkg. 250	T	e0387 BC-831 L 81d. Pkg. 100	q	96 BC-822 B Std. Pkg. 100		96 BC-832 L Std. Pkg. 100	7	3006 BC-823 XA 81d. Pkg. 30		BC-837 XA Std Pkg. 20	<u></u>	708 BC-824 XA 814. Pkg. 20	₹	718 BC-828 XA 86d. Phg.

NOTE: When ordering from columns 2 and 4; add Shyrlok, to the trade numbers.

\*NOTE: Parts "S22" and "S32" are furnished with 8-inch chain, unless otherwise specified in your orders.

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List No.	Sched- ule	Car- ton	Std. Each	Mfrs. List Each	W. E. List Each	List	Sched- ule	Car- ton	Std. Pkg.	Mfrs. List Each	W. E. List Each	List	Sched- ule	Car- ton		Mfrs. List Each	W. E. List Each
BA-821	В	10	250	\$0.46	\$1.10		В	25		\$0.41		CL -821	В	25		\$0.30	\$0.72
BA-S22	B	10	100	.76		CI -S22	B.	25	50	.71		CL -S22	_B	25	250	.60	1.44
BA-823	XA	10	20	.76		CI -S23	XA		20	.71		CL -823	XA	10	20	.60	1.44
BA-S24	XA	5	20	.76	1.82		ΧA		20	.71		CL -S24	XA	10	20	.60	1.44
BA-S25	XA	10	20	. 36		CI -S25	XA		20	.31		CL -S25	XA		20	.20	.48
BA-S31	L	10	100	.73		CI -S31	L	25	100	.68		CL -S31	L	25	100	.57	1.37
BA-832	L	10	100	1.03	2.47		L	25	50	.98		CL -S32	L	25	100	.87	2.09
BA-S37	XA		20	.91	2.18		XA	10	20	.86		CL -S37	XA	10	20	.75	1.80
BB-S21	В	10	250	.41		CJ -S21	В	25	100	.41	.98	CM-S21	В	١	500	.30	.72
BB-S22	В	10	100	.71		CJ -S22	В	25	50	.71	1.70	CM-S22	В	١	250	.60	1.44
BB-S23	XA	10	20	.71		CJ -S23	XA	١	20	.71	1.70	CM-S23	XA		20	.60	1.44
BB-S24	XA	5	20	.71	1.70	CJ -S24	XA		20	.71	1.70	CM-S24	XA		20	.60	1.44
BB-S25	XA	10	20	. 31	.74		XA	1	20	.31	.74	CM-S25	XA		20	.20	.48
BB-831	L	10	100	. 58	1.39	CJ -831	L	25	100	.68		CM-S31	L		100	.57	1.37
BB-832	L	10	100	.97	2.33	CJ -832	L	25	50	.98	2.35	CM-S32	l L	1	100	.87	2.09
BB-S37	XA		20	.86	2.06	CJ -837	XA	10	20	.86	2.06	CM-S37	XA		20	.75	1.80
BC-821	B	10	250	.41		CK-S21	В	25	100	.44	1.06	821	В		500	.23	.55
BC-S22	В	10	100	.71	1.70	CK-822	В	25	50	.74	1.78	S22	ĺВ		250	. 53	1.27
BC-823	XA	10	20	.71	1.70	CK-S23	XA	١., ١	20	.74	1.78	S23	XA		50	. 53	1.27
BC-824	XA	5	20	.71		CK-S24	XA	١ ا	20	.74	1.78	824	XA	l : :	50	. 53	1.27
BC-S25	XA	10	20	. 31		CK-S25	XA.	١ ا	20	.34		825	XA	::	20	.13	.31
BC-831	L	10	100	. 68	1.63	CK-S31	L	25	100	.71		831	CE C		100	. 50	1.20
BC-832	L	10	100	.98	2.35	CK-832	L	25	50	1.01	2.42		KEC	()	100	.80	1.92
BC-837	XA I	١	20	.86	2.06	CK-837	XA	10	20	.89	2.14		XA	1	50	.68	1.63

#### FLUTO PARTS.

FLOTO Parts	Part 818 8. P. Key Socket	Part #28 S. P. Shurlok Key Socket	Part 819 D. P. Key Socket	Part 820 D. P. Shurlok Key Socket	Part 230 660 Watte Bocket	600 Wats Shuriok Key Socket
12010 Falls			3.			
Part BD Concessed	80439 BD-818 B B-818 B Bod. Pkg. 250	BD-828 BD-828 100 Ptd. Pkg	8D-619 BD-619 Bd-619 Std. Phys. 350	80439 BD-839 BD-839 Bd. Phg.	819-830 BD-830 BB-830 B	RD-600 RD-600 D Sed. Plag.
Part BR Angle Concensed	e1455 BE-618 B 364. Pkg.	eitess BE-828 U Sted. Pkg.	BE-610 BE-610 Be-610 Be-610 Be-610 100	61455 BE-639 Decd. Pkg.	BE-830 BE-830 B Bell-830 B B B B B B B B B B B B B B B B B B B	OLS BE-COO BE-COO D L D Sud. Phys.
Part BJ Small Covered Saso	BJ-518 BJ-518 B B44. Pkg.	80130 BJ-638 L SLd. Pkg.	83-619 83-619 83-619 250	88186 BJ-629 GL 81d. Pkg	81-830 B 84d. Ping.	917-000 91-000 0 L 00d. Phys.
Pari BK M odium Oovered Base	estate BEC-818 BS B4d Pkg.	BK-888 L L 100 Pkg.	05000 BK-510 B B Pkg.	Std. Pkg.	638 Bik-830 B Setd. Pkg.	816-500 BL-500 L U Sed Preg.
Part BL 3M Bog Bam	BL-818 B Std. Pkg.	BL ess Std. Pkg.	7 BL-819 B BL-819 100 Pkg.	7 BL-839 100 Pkg.	621 BL-830 B 064d. Pkg.	BI-Spa L D Sad. Plag.
Port BM Large Covered State	691 BM-618 B B B B B B B B B B B B B B B B B B B	891 BM 828 BM 828 100	834 519 BM-519 Btd. Pkg	421 BM 429 GRtd. Pkg.	BM 820 BM 820 B 84d. Pkg.	BM-600 DM-Pics 0 100
Part BN 4' Box Ann	884-818 844- Pkg.	43 BN-828 L L 100 100	BN-4 Pkg.	48 BN-820 BN-820 Bud. Ping.	BN-890 BN-890 Gastel, Plag.	Till day

NOTE: When ordering from columns 2, 4 and 6; add Sharlok, to the trade numbers.

NOTE: The single pole receptacies on this page have been given the same trade number as the double pole receptacies, therefore it will be necessary for you to use the Part Designation if you desire a particular type.

List No.	Sched- ule	Car- ton	Std. Pkg.	Mfrs. List Each	W. E. List Each	List	Sched- ule		Std. Pkg.	Mfrs. List Each	W. E. List Each	List No.	Sched- ule	Car- ton	Std. Pkg.	Mirs. List Each	W. E. List Each
BD-818 BD-819 BD-829 BD-828 BD-839 BD-839 BE-818 BE-819 BE-828 BE-828 BE-828 BE-828 BE-828 BE-828 BE-828 BE-828 BE-839 BJ-819		10 10 10 10 10 10 10 10 10 10 10 10 10 1	250 250 250 100 100 100 100 100 100 100 250 250	.49 .52 .76 .76 .79 .49 .49 .52 .76	1.82 1.89 1.18 1.18 1.25 1.82 1.82 1.89 1.30	BJ -830 BK -818 BK -829 BK -829 BK -829 BK -829 BL -819 BL -819 BL -820 BL -828 BL -828 BL -839	LLBBBLLLBBBLLLB	10 10 1 1 1 1 1 1 1 1 1 1 1 1 1	100 100 100 100 100 100 100 100 100 100	\$0.81 .84 .63 .66 .90 .90 .93 .63 .63 .66 .90	2.02 1.51 1.51 1.58 2.16 2.23 1.51 1.51 1.58 2.16 2.16 2.23	BM-S20 BM-S28 BM-S28 BM-S30 BM-S19 BN-S19 BN-S28 BN-S28 BN-S29 BN-S28 BN-S29 BN-S29 BN-S29 BN-S29	B L L B B B L L B B B L	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100 100 100 100 100 100 100 100 500 500	.96 1.20 1.20 1.23 .26 .26 .29	\$2.30 2.88 2.88 2.92 2.23 2.23 2.30 2.88 2.88 2.92 .62 .70

## FLUTO PARTS Part \*832 Part 823 Part 837 Part 825 Part S21 Part \*822 Fluto ure Swit Fluto Rosette Fixt Keyless Pull 156 BD-832 L Std. Pkg. 100 BD-837 XA Std. Pkg 20 BE-837 XA Std. Pkg. 20 68138 BJ-832 L Std. Pkg. 100 3018 BL-823 XA Std. Pkg 20 BL-S21 B Std Pkg XA 8td. Pkg 724 BN-825 XA Std. Pkg. 20

NOTE: When ordering from columns 2 and 4; add Sharlok, to the trade numbers.

\*NOTE: Parts "\$22" and "\$32" are furnished with 8-inch chain, unless otherwise specified in your orders. The trade numbers and Part Designations with each cut, indicate the same device with the exception of P & \$ 97,-97 Shurlok; 128,-128 Shurlok: 413,-413 Shurlok and 149,-149 Shurlok. When ordering these devices if you specify the Trade Number, the device will be supplied with 18-inch chain; and if you specify the Part Designation, the device will be supplied with 8-inch chain. Longer chain may be supplied when desired.

	1		1	Mfrs.	W. E.	1		ī	ī	Mfra.	W. E.	1			_	Mfrs.	W. E.
List	Sched-	Car-	Std.	List	List	List	Sched-	Car-	Std.	List	List		Sched-			List	List
No.	ule	ton	Pkg.	Each	Each	No.	ule	ton	Pkg.	Each	Each	No.	ule	ton	Pkg.	Each	Each
BD-821	В	10	250			BJ 8-31	L	10		\$0.78	\$1.87	BM-S23	XA	1		\$1.20	\$2.88
BD-822	В	10	100			BJ -832	L	10	100			BM-824	XA	1	20	1.20	2.88
BD-823	XA	10	20			BJ837	XA		20	.96		BM-S25	XA	1	20	.80	1.92
BD-824	XA	10	20		1.82	BK-S21	В	1	100			BM-S31	L	1	100	1.17	2.81
BD-825	XA	10	20			BK-S22	В	1	50	1.00		BM-S32	L	1	-50	1.57	3.77
BD-831	L	10	100				XA	1	20	.90		BM-837	XA		20	1.35	3.24
BD-832	L	10	100		2.41	BK -S24	XA	1	20	.90		BN -821	B	1	100		2.16
BD-837	XA		20	.91		BK-825	XA	1	20	.50		BN -S22	В	1	50	1.30	3.12
BE-S21	B	10	100			BK-S31	L	1	100			BN -S23	XA	1	20,		2.88
BE-S22	В	10	50			BK-832	L	1	50	1.27		BN -S24	XA	1	20	1.20	2.88
BE-S23	XA		20			BK-S37	XA		20	1.05		BN -825	XA	1 1	20	.80	1.92
BE-824	XA		20	.76		BL -S21	В	1	100			BN -S31	L	1	100	1.17	2.81
BE-S25	XA		20			BL -822	B	1	50	1.00		BN -S32	L	1 1	50	1.57	3.77
BE-S31	L	10	100			BL -S23	XA	1	20	.90		BN -837	XA		20	1.35	3.24
BE-S32	L	10	50			BL -S24	XA	1	20	.90	2.16		B		500		. 55
BE-S37	XA		20			BL -825	XA	1	20	. 50		S22	В		250		1.27
BJ -S21	B	10	250				L	1	100			S23	L		100	. 53	1.27
BJ -S22	В	10	100			BL -832	L	1	50	1.27	3.05		XA		50	. 53	1.27
BJ -823	XA	10	20	.81		BL -837	XA		20	1.05	2.41		XX	50	_20	.13	. 31
BJ -824	XA	10	20	.81		BM-S21	В	1	100		2.16			$\cup$ . $\cup$	100	.50	1.20
BJ -825	XA_	10	20	.41	.98	BM-S22	B	1	50	1.30	3.12	S-37	XA		$\bigcirc$ 50	. 68	1.63

FLUTOLIER PARTS	Part 833 8 P Key Socket	Part 842 Shurlok S. P. Key Socket	Part 828 Short Keylem Socket	Part 845 Shirrlok Keyless Socket	Part 836 Pull Soctes	Part 846 Shurtoit
Part PA H' Cap	7000 FA-833 B Std. Pkg.	7000 PA-843 L Std. Pkg.	7001 FA-835 B 8td. Pkg 500	7001 FA-845 L Std. Pkg.	7006 PA-636 B Std. Pkg. 250	7008 7A-546 L Std. Pkg.
Part FB K ' Cap	7010 FB-833 B 81d. Pkg 250	7010 FB-843 L Std. Pkg.	7100 FB-835 B 8td. Pkg. 250	7100 PB-845 L Rtd. Pkg. 100	7012 FB-826 B Std. Pkg.	7019 FB-846 L Std. Phs.
Part FC 14' Cap	7004 PC-833 B 8td. Pkg. 250	7004 PC-843 L 8td. Pkg.	700.5 PC-83.5 B Std. Pkg. 250	7006 FC-845 L Btd. Pkg.	7007 FC-838 B Std. Plug.	7007 PC-846 L Bid. Pkg.
Part FD  K' Fixture Cap	7014 PD-833 B 8td. Pkg 250	7014 FD-843 L Btd Pkg	7101 PD-835 B 8td. Pkg 250	7101 PD-845 L 8td. Pkg.	7016 FD-S36 B 81d. Pkg.	7016 FD-846 L 8td. Phg.
Part FE,	7017 PE-823 B 81d. Pkg 250	7017 PE-843 L Bid. Pkg	7109 PK-835 B Rtd. Pkg. 250	7102 FE-845 L 81d Pkg.	7010 PE-836 B 8td. Pkg.	7019 FE-940 L 8td. Pkg.
Part FF 16" Angle Cap	7002 PFF-833 B 8td. Pkg.	7002 PFF-843 L Std. Pkg	7008 FF-835 B 8id. Pkg.	7003 FF-845 L Btd. Pkg.	7008 PF-836 B 8td. Pkg.	7000 PP-846 L. Std. Phg.
Part PO H * Angle Cap	7021 FG-833 B 8td. Pkg	7081 FU-843 L Std. Pkg	7104 FG-835 B 8td. Pkg.	7104 PG-845 L 8td. Pkg.	7023 FO-S36 B Sid. Pkg.	PG-546 L Rid. Pkg.
Part PH H' Angle Cap	7024 FH-933 B Std. Pkg.	7024 FH-843 L 81d. Pkg.	7106 FH-835 B Std. Pkg.	7105 FH-845 L Std. Pkg.	7096 PH-836 B Std. Pkg. 50	7006 FH-844 L Bid. Pkg. 50
Part FI H' Angle Fixture Cap	7027 F1-838 B 8td. Pkg.	7017 F1-843 D 100	7106 P1-835 B Std. Pkg.	7104 P1-845 L 8td. Pkg.	7008 FI-936 B Std. Plag.	7000 F1-546 J. Std. Pkg.
Part FJ K' Angle Fixture Cap	7000 FJ-833 B 8td. Pkg.	7430 FJ-843 L Std: Pkg.	7107 FJ-835 B 8td. Pkg.	7167 FJ-845 L Std. Pkg.	7000 F7-636 B Std. Phg. 50	77-540 1-540 1-564. Pits. 20.

NOTE: When ordering from columns 2, 4 and 6; add Sharlok to the trade numbers.

List No.	Sched- ule		Std. Pkg.		W. E. List Each	List No.	Sched- ule	Car- ton	Std. Pkg.	Mirs. List Each	W. E. List Each	List	Sched- ule		Std. Pkg.	Mirs. List Each	W.E. List Each
FA	В		500		\$0.17	FC-S45	L	25		\$0.63		FG-S46	L	25	50		\$2.40
FB	В		100		.38	FC-S46	L	25	100	.93	2.23		В	25	100		1.08
FC	В	1	250	. 13		FD-S33	B	25	250	.39	.94		В	25	100	.41	.96
FD	В		250	.13	.31	FD-835	В	25	250	.36	.86	FH-836	В	25	50	.71	1.70
FE	l B		50	.16	.38	FD-S36	В	25	100	.66	1.58	FH-S43	L	25	100	.71	1.70
FF	B		100	. 12	. 29	FD-S43	L	25	100	.66	1.58	FH-S45	L	25	100	.68	1.63
FG	l B		50	.21	.50	FD-S45	L	25	100	.63	1.51	FH-S46	L	25	50	.98	2.35
FH	l B		50	. 18	.43	FD-S46	L	25	100	.93	2.23		В	25	100	.44	1.06
FI	B		50	.18	.43	FE-833	В	25	250	.42	1.01	FI -835	B B	25	100	.41	.98
FJ	В		50	.21	.50	FE-S35	В	25	250	. 39	.94	FI -836	В	25	50	.71	1.70
FA-S33	В	25	500	. 33	.79	FE-S36	В	25	100	.69	1.66	FI -S43	Ĺ	25	100	.71	1.70
FA-S35	ĺΒ̈́	25	500		.72	FE-S43	Ĺ	25	100		1.66	FI -845	Ĺ	25	100	.68	1.63
FA-S36	B	25	250		1.44	FE-S45	l î.	25	100	. 66	1.58		Ī	25	50	.98	2.35
FA-S43	ΙÏ	25	100	.60	1.44	FE-S46	Ĺ	25	100	.96	2.30		B	25	100	.47	4.13
FA-S45	l ï	25	100	. 57	1.37	FF-833	B	25	100	.38	.91		B	25	100	.44	1.06
FA-S46	ΙĒ	25	100		2.09	FF-S35	B	25	100	. 35	.84		B	25	50	.74	1.78
FB-833	ΙĒ	25	250	.42	1.01	FF-S36	B	25	50	. 65	1.56		L	25	100	.74	1.78
FB-S35	ÌВ	25	250	.39 1	.94	FF-S43	ΙĒ	25	100			FJ -845	ΙĪΙ	25	100	.71	2.40
FB-836	ΙĒ	25	100	.69	1.66	FF-S45	Ĺ	25	100	.62	1.29	FJ -S46	līl	25	50	1.01	.63
FB-S43	l Ï	25	100	. 69	1.66	FF-S46	Ĺ	25	50	.92	2 21	833	Б		500	.26	. 55
FB-S45	Ĺ	25	100	.66	1.58	FG-S33	$\bar{\mathbf{B}}$	25	100		1.13	S35	B		500	.23	1.51 1.27
FB-S46	Ιί	25	100	.96	2.30	FG-S35	В	25	100		1.06	S36	ĺй́I		250	.63	1.27
FC-833	B	25	250	.39		FG-836	Ř	25	50	.74	1.78	S43 _	Lĭ		100	.53	1.20
FC-835	B	25	250	.36		FG-S43	Ĭ.	25	100	.74	1.78	845	7 ÷ 1	$\alpha$	100	.50	1.92
FC-836	l в	25	100	.66	1 58	FG-S45	i.	25	100	.71	1).70	i <b>846</b> by	ъФC	191	lioo	.80	
FC-843	ľ	25	100	.66	1.58	1/10	l "'		1 -00	ı •••	4	1		$\bigcirc$	757		

	,				<del></del> 7
PORCELAIN PARTS	Part Sz6 B P Key Socket	Port 827 Keylena Bocket	PORCELAIN PARTS	Part 826 8.P. Key Bocket	Part 827 Keyless Soctos
Part PA Pendent Cap For Reinforced Cord	%61317 PA-826 B B 8td Pkg 250	*60317 PA-827 B Sid Pkg	Part PR Concealed Base	61227 PH-826 B B Std. Pkg.	00337 PH-827 B 84d. Pkg.
Part PB Pendent Cap For Twinted Lamp Cord	61217 PB-326 B 8td. Pkg 250	90217 PB-827 B 8td Pkg 250	Part PI Cleat Base	81047 P1-826 B 84d. Pkg 100	81107 P1-827 B 8td. Pkg.
Part PC 16 * Brass Cap	61777 PC-826 B 81d. Pkg	90227 PC-827 B 8td. Pkg	Part PK Wood – Woulding Base	100136 PK-826 B 814. Pkg.	496 PK-827 Bd. Pkg. 100. Pkg.
Part PD  K* Brass Cap	434 PD-826 B 81d. Pkg 100	435 PD-827 B Std. Pkg 100	Part PL Large Con- coaled Base	G2247 PL-526 B Std Pkg.	00847 PL-827 B 8td. Pkg.
Part PE 36 * Brass Cap	61327 PK-820 PB-840 Pkg.	60327 PK-827 B 8td. Pkg.	Part PM	46 PM-826 B Std. Pkg 100	4 PM-927 B 8td. Pkg.
Part PF 94 Alemiaum Cap	4A8  PF-826  BB, 8td. Pkg.	448 PP-827 B Rtd. Pkg.	3 Q Bos Base	82 PN-826	83 PN-827 Bld. Pkg.
Part PO	485 PG-826 B 8td. Pkg.	241 PO-827 B 8td. Pkg	Part PN 4 * Box Base	Btd. Pkg	100
Part PO %"Brass Angle Cap	1218 PO-826 B Std. Pkg 100	1219 PO-S27 B Std. Pkg			
Part PQ %" Aluminui Angle Cap	1220 PQ-826 Rid. Pkg	1221 1 PQ-S27 R Std. Pkg			
Part PR 4. Aluminum Angle Cap	1222 PR-826 B Std Pkg	1223 PR-827 R Std Pks			

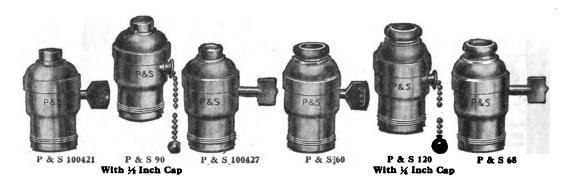
## List Prices and Data

List No.	Sched- ule	Car- ton	Std. Pkg.	Mfrs. List Each	W. E. List Each	List No.	Sched- ule	Car- ton	Std. Pkg.	Mfrs. List Each	W. E. List Each	List No.	Sched- ule	Car- ton	Std. Pkg.	Mfrs. List Each	W. E. List Each
PA PB PC PD PE PF PG PA-S26 PA-S27 PB-S27 PC-S26 PC-S27	B B B B B B B B B B B B B B B B B B B	    10 10 10 10 10 10	250 250 100 50 100 250 250 250 250 100	.05 .10 .10 .10 .25 .25 .30 .25 .30 .25	\$0.12 12 24 24 24 60 60 72 60 72 60 72	PE-S26 PE-S27 PF-S26 PF-S27 PG-S26 PG-S27 PH PI PK	B B B B B B B B B B B B B B B B B B B	10 10 10 10 10 10 10 10 	100 100 100 100 100 100 100 100 100 50	.30 .35 .30 .50 .45 .50 .45 .09 .09	\$0.84 .72 .84 .72 1.20 1.08 1.20 1.08 .22 .22 .22 .22 .48 .60	PI -S27 PK-S26 PK-S27 PL-S26 PL-S27 PM-S26 PM-S27 PN-S26 PN-S27	B B B B B B B B B B B B B B B B B B B	10 10 10 10 10 10 10 10 11 1 1	100 100 100 100 100 100 100 100 100 100	.34 .29 .34 .29 .34 .29 .45 .40	\$0.82 .70 .82 .70 .82 .70 .82 .70 1.08 .96

Wiring Devices

### P & S SOCKETS

## FLUTO Shell



#### WITH 1/8 INCH CAP

#### Schedule "B"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wgt.	Mfrs. List Each	W. E. List Each
100421	Key, ¾ in. long, composition, double pole	25	500	130 lbs.	\$0.33	\$0.79
298▲	Key, 1 in. long, composition, double pole	25	500	135 lbs.	.33	.79
59480	Key, single pole	25	500	130 lbs.	.33	.79
600	Key, 660 watts	25	500	130 lbs.	.36	.86
100427	Key, ¾ in. long, brass, double pole	25	100	30 lbs.	.40	.96
311	Key, 1 in. long, brass, double pole	25	100	31 lbs.	.40	.96
<b>59482</b>	Keyless	25	500	125 lbs.	.30	.72
90	Pull	25	250	65 lbs.	. 60	1.44

### WITH 1/8 INCH CAP Aburlok

#### Schedule "L"

100421	Shyrlok_Key ¾ in. long, composition, double pole	25	100	30 lbs. <sub>1</sub>	\$0.60	\$1.44
298▲	Shyrlok Key 1 in. long, composition, double pole.	25	100	30 lbs.	.60	1.44
<b>59480</b>	Shyrlok, single pole	25	100	30 lbs.	.60	1.44
600	Sharlok . 660 watts	25	100	30 lbs.	.63	1.51
100427	Shurlok Key 34 in. long, brass, double pole	25	100	30 lbs.	.67	1.61
311	Shyrlok Key 1 in. long, brass, double pole	25	100	31 lbs.	.60	1.44
<b>59482</b>	Sharlok Keyless	25	100	29 lbs.	.87	1.37
90	Shyrlok_ Pull	25	100	30 lbs.	.87	2.09

#### WITH 1/4 INCH CAP

#### Schedule "B"

60▲	Key ¾ in. long, composition, double pole	25	250	75 lbs.	\$0.42 j	\$1.00
7509	Key, single pole	25	250	75 lbs.	.42	1.00
606	Key, 660 watts	<b>25</b>	250	75 lbs.	.45	1.08
68▲	Key, ¾ in. long, brass, double pole	25	100	30 lbs.	.49	1.18
312	Key, 1 in. long, brass, double pole	25	100	31 lbs.	.49	1.18
7510	Keyless	25	250	72 lbs.	.39	.94
120	Pull	25	100	30 lbs.	.69	1.66

#### WITH 1/4 INCH CAP Shurlok

#### Schedule "L"

60▲	Shyrlok, Key 34 in. long, composition, double pole.	25	100	30 lbs.	\$0.69	\$1.66
7509	Shyrlok Key, single pole	25	100	30 lbs.	.69	1.66
606	Shyrlok, 660 watts	25	100	30 lbs.	.72	1.73
68▲	Shyrlok, Key 3/4 in. long, brass, double pole	25	100	30 lbs.	.76	1.82
312	Shyrlok, Key 1 in. long, brass, double pole	25	100	31 lbs.	.76	1.82
7510	Shyrlok, Keyless	25	100	29 lbs.	.66	1.58
120	Shyrlok_Pull	25	100	30 lbs.	. 96	2.30

Brush brass is the regular finish. There is no extra charge for polished or old brass finish. 

## P & S SOCKETS

#### FLOTO Shell







P & S 91 With 1/2 Inch Cap



P & S 100428



P & S:100425 With Pendent Cap



P & S 92

#### WITH 3/8 INCH CAP

#### Schedule "B"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wgt.	Mfrs. List Each	W. E. List Each
100423	Key ¾ in. long, composition, double pole	25	250	75 lbs.	\$0.39	\$0.94
<b>594</b> 81	Key, single pole	25	250	75 lbs.	.39	.94
612	Key, 660 watts	25	250	75 lbs.	.42	1.00
100428*	Key ¾ in. long, brass, double pole	25	100	30 lbs.	.46	1.10
313^	Key 1 in. long, brass, double pole	25	100	31 lbs.	.36	.86
<b>59483</b>	Keyless	25	250	72 lbs.	.36	.86
91	Pull	25	100	30 lbs.	.66	1.58

#### WITH % INCH CAP Thurlok

#### Schedule "L"

100423▲	Shyrlok Key 3/4 in. long, brass, double pole	25	100	30 lbs.	\$0.66	\$1.58
<b>594</b> 81 <b>▲</b>	Shyrlek Key, single pole	25	100	30 lbs.	.66	1.58
612	Shyrlok Key, 660 watts	25	100	30 lbs.	.69	1.66
100428	Shyrlok Key, ¾ in. long, brass, double pole	25	100	30 lbs.	.73	1.75
313▲	Shyrlok Key 1 in. long, brass, double pole	25	100	31 lbs.	.73	1.75
<b>59483</b>	Sharlok Keyless	25	100	29 lbs.	.63	1.51
91	Shyrlok_Pull	25	100	30 lbs.	.93	2.23

#### WITH PENDENT CAP

#### Schedule "B"

100425	Key 3/4 in. long, composition, double pole	25	500	125 lbs.	\$0.33	\$0.79
59486	Key, single pole	25	500	130 lbs.	.33	.79
614	Key, 660 watts	25	500	125 lbs.	.36	. 86
<b>59487</b>	Keyless	25	500	120 lbs.	.30	. <b>72</b>
92	Pull	25	250	70 lbs.	.60	1.44

#### WITH PENDENT CAP Shurlok

#### Schedule "L"

100425▲	Sharlek, Key 3/4 in. long, composition, double pole.	25	100	30 lbs. 1	\$0.60 I	\$1.44
59486	Shyrlok, Key, single pole		100	30 lbs.	.60	1.44
614	Shyrlok Key, 660 watts	25	100	30 lbs.	.63	1.51
59487	Shurlok, Keyless	25	100	29 lbs.	.57	1.37
92	Shyrlok Pull	25	100	30 lbs.	.87	2.09

Brush brass is the regular finish. There is no extra charge for polished or old brass finish.

<sup>\*</sup>National Electrical Code Standard. Illustrations are 3/8 of full size gitized by GOOGIC

#### P & S SOCKETS











P & S 476

P & S 507

P & S 572

#### SOCKETS WITH 1/8 INCH ANGLE CAP-FLUTO INTERCHANGEABLE SHELL

Schedule "B"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt.	Mfrs. List Each	W. E. List Each
474	Key, double pole	25	100	30 lbs.	\$0.38	\$0.91
7500	Key, single pole	25	100	30 lbs.	.38	.91
624	Key, 660 watt	25	100	30 lbs.	.41	.98
7501	Keyless	25	100	28 lbs.	.35	.84
					l	1
476	Pull	25	50	18 lbs.	65	1.56
476	Pull	25	50	18 lbs.		1.56 dule "L"
476	Pull	25	100	18 lbs.		
474	Pull   Shurlok Key, double pole				Sche	dule "L"
474	Pull   Shurlok Key, double pole   Shurlok Key, single pole   Shurlok Key,	25	100	30 lbs.	Sche   \$0.65	dule "L"
474 7500	Pull   Shurlok Key, double pole	25 25	100	30 lbs. 30 lbs.	Sche \$0.65 .65	sdule "L" \$1.56 1.56

#### SOCKETS WITH 1/4 INCH ANGLE CAP-FLUTO INTERCHANGEABLE SHELL

Schedule "B"

			<u> </u>		
Pkg. Wt.	Std. Pkg.	Carton Quantity	Description	List No.	
33 lbs.	100	25	Key, double pole	572	
33 lbs.	100		Key, single pole	<b>7</b> 503	
33 lbs.	100	25	Key, 660 watt	628	
31 lbs.	100	25	Keyless	7504	
22 lbs.	50	25	Pull	507	
33 lbs.	100	25	Shurlok Key, double pole	572	
33 lbs.	100	25	Shurlok Key, single pole	7503	
33 lbs.	100	25	Shurlok Kev. 660 watt	628	
31 lbs.	100	25	Shurlok Keyless	7504	
22 lba	50		Shurlol Pull	507	
M	Wt.  33 lbs. 33 lbs. 33 lbs. 31 lbs. 22 lbs.  33 lbs. 33 lbs. 33 lbs. 33 lbs. 31 lbs.	Pkg. Wt.  100 33 lbs. 100 33 lbs. 100 33 lbs. 100 31 lbs. 50 22 lbs.  100 33 lbs. 100 33 lbs. 100 33 lbs. 100 33 lbs. 100 33 lbs. 100 33 lbs. 100 33 lbs. 100 33 lbs.	Quantity         Pkg.         Wt.           25         100         33 lbs.           25         100         33 lbs.           25         100         33 lbs.           25         100         31 lbs.           25         50         22 lbs.           25         100         33 lbs.           25         100         33 lbs.           25         100         33 lbs.           25         100         33 lbs.           25         100         31 lbs.           25         100         31 lbs.	Description   Quantity   Pkg.   Wt.	

## SOCKETS WITH 3/8 INCH ANGLE CAP-FLUTO INTERCHANGEABLE SHELL

Schedule "B"

List	Description	Carton	Std.	Pkg.	Mfrs. List	W. E. List
No.		Quantity	Pkg.	Wt.	Each	Each
480 7506 626 7507 482	Key, double pole. Key, single pole. Key, 660 watt Keyless. Pull	25	100 100 100 100 50	33 lbs. 33 lbs. 33 lbs. 31 lbs. 22 lbs.	\$0.44 .44 .47 .41 .71	\$1.06 1.06 1.13 .96 1.70
					Sche	dule "L"
480	Shurlok Key, double pole	25	100	33 lbs.	\$0.71	\$1.70
7506		25	100	33 lbs.	.71	1.70

## P & S SOCKETS



P & S 306 With 3% Inch Cap Male Thread



P & S 100412 With 1/2 Inch Cap



P & S 58 With 1/2 Inch Cap



P & S 100414 With 3/ Inch Cap



P & S 100416 With Pendent Cap

#### FLOTO Shell WITH 3/8 INCH CAP-MALE THREAD

	WITH 3/8 INCH CAP—MALE THREAD					Schedule "B"	
List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each	
306* 59484 616 59485	Key, double pole Key, single pole Key, 660 watts Keyless	25 25 25 25 25	250 250 250 250 250	75 75 75 72	\$0.42 .42 .45 .39	\$1.00 1.00 1.08 .94	
	WITH 3/8 INCH CAP—MALE THRI	EAD 5h	urlok	<b>.</b>	Sched	ule "L"	
3064	Shyrlok_ key, double pole	25	100	30	\$0.69	\$1.66	

	WITH 3/8 INCH CAP—MALE THREAD Shurlok					Schedule "L"		
306▲	Sharlek_key, double pole   Sharlek_key, single pole   Sharlek_key, 660 watts   Sharlek_keyless	25	100	30	\$0.69	\$1.66		
<b>59484</b>	Sharlek key, single pole	25	100	30	.69	1.66		
616	Shyrlok, key, 660 watts	25	100	30	.72	1.73		
<b>5048</b> 5	Shyrlok, keyless	25	100	29	.66	1.58		

00200	SHATMAL REVIESS		1 100	23	, <del>00</del>	1.30
	Passmour Shell					
	WITH 1/8 INCH CAP				Schedu	le "B"
45 -1 110			1 700 1	700		
100412	Key, single pole	25	500	130	\$0.33	\$0.79
100413	Keyless	25	500	125	.30	.72
87	Pull	25	250	75	.60	1.44
	WITH 1/8 INCH CAP Shur	lok				ule "L"
100412	Shurlok Key, single pole	, 25	100	30	\$0.60	\$1.44
100413	Shyrlok_keyless	25	100	29	.57	1.37
87	Sharlek pull	25	100	30	.87	2.09
	WITH 1/4 INCH CAP		100	-32	Schedu	ıle "B"
58▲	Key, single pole	25	250	75	\$0.42	\$1.00
59▲	Keyless	25	250	72	.39	.94
118	Pull	25	100	30	.69	1.60
	WITH 1/4 INCH CAP Shu	rlok	1966	-	Sched	ule "L'
58▲	Shyrlok key, single pole	25	1 100	30	\$0.69	\$1.66
59▲	Shyrlok_keyless	25	100	29	.66	1.58
118	Shyrlok pull	25	100	30	.96	2.30
	WITH 3/8 INCH CAP		of the second	n =1	Schedu	le "B"
100414	Key, single pole	25	1 250 1	75	\$0.39	\$0.94
100414	Keyless	25	250	72	.36	.86
88	Pull	25	100	30	.66	1.58
00			100	50		-
	WITH 3/8 INCH CAP Shuz	TOK			Schedu	ule "L'
100414	Shyrlok, key, single pole	25	100	-30	.66	1.58
100415	Shyrlok keyless	25	100	29	.63	1.51
88	Shyrlok pull	25	100	30	.93	2.23
	WITH PENDENT CAP				Schedu	le "B"
00416	Key, single pole	25	1 500	1125	\$0.33	\$0.79
00417	Keyless.	25	500	120	.30	.73
89	Pull	25	250	70	.60	1.44
	WITH PENDENT CAP Short	rlok			Schedi	ule "L'
001104		25	100	1 30	\$0.60	\$1.44
00416	Shyrlok key, single pole					
.00417						
89	Savrior pull			1		4.03
Shyrlol Shyrlol h brass	k. keyless. k. pull is the regular finish. There is no extra charge for lectrical Code Standard. Illustrations are 3/8 of 95 & 96	25 25 or polisifull size	100 100 hed or ol	29 30	.57 .87	1.37

## P & S SOCKETS AND RECEPTACLES







P & S 7030



P & S 7017



P & S 7027

Ð	Q	177	ITT	י זראי	FD	80	CKE'	TQ

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
7014	Key single pole, 1/2 in. fixture cap		250	64	\$0.39	\$0.94
7101	Keyless, short shell, 1/8 in. fixture cap		250	62	.36	.86
7016	Pull, ½ in. fixture cap. Key, single pole, ½ in. angle fixture cap.	25	100	30	.66	1.58
7027	Key, single pole, 1/8 in. angle fixture cap		100	32	.44	1.06
7106	Keyless, short shell, 1/8 in. angle fixture cap	25	100	30	.41	.98
7029	Pull, 1/8 in. angle fixture cap	25	50	19	.71	1.70
0.1				UN JVI	Schedul	e "L"
7014	Shurlok, key, single pole, 1/8 in. fixture cap	25	100	64	\$0.71	\$1.70
7101	Shurlok, keyless, short shell, 1/8 in. fixture cap		100	62	.36	.86
7016	Shurlok, pull, 1/8 in. fixture cap	25	100	30	.66	1.58
7027	Shurlok, key, single pole, 1/2 in, angle fixture cap		100	32	.71	1.70
7106	Shurlok, keyless, short shell, 1/8 in. angle fixture cap	25	100	30	.41	.98
7029	Shurlock, pull, 1/8 in. angle fixture cap		50	19	.98	2.35
81	WITH ¼ INCH FIX	TURE CAP			Schedul	e "B"
7017	Key, single pole, ¼ in. fixture cap		250	64	1 \$0.42	\$1.01
7102	Keyless, short shell, ¼ in. fixture cap		250	62	.39	.94
7019	Pull. ¼ in. fixture cap		100	30	.69	1.66
7030	Key, single pole, ¼ in. angle fixture cap	25	100	30	.47	1.29
7107	Keyless, short shell, ¼ in. angle fixture cap	25	100	28	.44	1.06
7032	Pull, ¼ in. angle fixture cap	25	50	16	.74	1.78
10					Schedul	e "L"
7017	Shurlok, single pole, ¼ in. fixture cap	25	100	64	1 80.69 1	\$1.78
7102	Shurlok, keyless, short shell, ¼ in. fixture cap	25	100	62	.39	.94
7019	Shurlock, pull, 1/4 in, fixture cap.	25	100	30	.69	1.66
7030	Shurlock, pull, ¼ in. fixture cap. Shurlock, key, single pole, short shell, ¼ in. angle fixture ca	25	100	30	.47	1.13
7107	Shurlok, keyless, short shell, ¼ in, angle fixture cap		100	28	.44	1.06
7032	Shurlok, pull, ¼ in. angle fixture cap	25	50	16	.74	1.78



P & S 60430



	P & S WALL RECEPTACLES				Schedul	e "B"
List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
108 108 627 68137	Keyless, slotted porcelain base, screws spaced 1½ in. on centers		250 100 250 250	60 35 105 100	\$0.25 .52 .57 .57	\$0.60 1.25 1.37 1.22
					Schedu	• "L"
627 68137	Shurlock, key 660 watts, brass covered base, screws spaced 1¾ in. on centers Shurlock, keyless brass covered base, screws spaced 1¾ in. on centers	10 10	100 100	45 44	.84 .78	\$2.02 1.87
					Schedul	e "B"
60430 619 60431 156	Key, large porcelain base, screws spaced 2 ¼ in. on centers.  Key, 660 watts, large porcelain base, screws spaced 2 ¼ in. on centers.  Keyless, large porcelain base, screws spaced 2 ¼ in. on centers.  Pull, large porcelain base, screws spaced 2 ¼ in. on centers.	10 10 10 10	250 250 250 100	155 155 155 69	.49 .52 .46 .76	\$1.18 1.25 1.10 1.82
	,				Schedul	• "L"
60430 619 60431 156	Shurlock, key, large porcelain base, screws spaced 2 ft in. on centers	10 10 10 10	100 100 100 100	69 69 65 69	.76 .79 .73 1.03	\$1.82 1.90 1.75 2.47

## P & S FLUTOLIER SOCKETS

## Interchangeable Shell













P & S 7000

P & S 7100

P & S 7002

P & S 7006

P & S 7026 Schedule "B"

WITH 1/8 INCI	H CAF
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List		Carton	Std.	Pkg.	Mfrs.	W. E
No.	Description	Quantity	Pkg.	Wt.	List	List
140-	·	Quantity	ı vg.	Lbs.	Each	Each
7000	Key, single pole, ½ in. cap	25	500	105	\$0.33	\$0.79
7001	Keyless, 1/8 in. cap, short	$\frac{25}{25}$	500	80	.30	.72
7002	Key, single pole, ½ in. angle cap	$\frac{25}{25}$	100	18	.38	.91
7003	Keyless, ½ in. angle cap, short.	25	100	20	.35	.84
7006	Pull, ½ in. cap.	$\frac{25}{25}$	250	63	.60	1.44
7008	Pull, ½ in. angle cap.	$\frac{25}{25}$	50	14	65	1.56
1000	run, 78 m. angle cap	20	- 50	14	- 00	1.30
					Schedul	le "L"
7000	Shyrlok key, single pole, 1/8 in. cap	25	100	25	\$0.60	\$1.44
7001	Shyrlek keyless, 1/8 in. cap, short	25	100	$\frac{25}{25}$	.57	1.37
7002	Shyrlek key, single pole, 1/8 in. angle cap.	25	100	18	.65	1.56
7003	Shyrlok, keyless, ½ in. angle cap, short	$\frac{25}{25}$	100	20	.62	1.49
7006	Shyrlok, pull, 1/8 in. cap.	$\frac{25}{25}$	250	63	.87	2.09
7008	Shyrlok, pull, 1/8 in. angle cap.	$\frac{25}{25}$	50	14	.92	2.21
1000	Justice puil, 78 in. angle cap	20	90	14	.92	2.21
	WITH 1/4 INCH CAP			:	Schedul	e "B"
7010	Key, single pole, ¼ in. cap	25	250	50	\$0.42	\$1.03
7100	Keyless, ¼ in. cap, short	25	250	45	.39	.96
7021	Key, single pole, ¼ in. angle cap	25	100	20	.47	1.15
7104	Keyless, ¼ inch, angle cap, short	25	100	20	.44	1.08
7012	Pull, ¼ in. cap	25	100	$\bar{20}$	.69	1.69
7023	Pull, ¼ in. angle cap.	$\overline{25}$	50	16	7.74	1.74
	1 2 a.s., /4 a.s.B.o oup				· · · · ·	
					Schedul	e "L"
7010	Shyrlok single pole, ¼ in. cap	25	100	25	\$0.69	\$1.69
7100	Shyrlok keyless, ¼ in. cap, short	25	100	25	.66	1.62
7021	Sharlek key, single pole, 1/4 in. cap	25	100	20	.74	1.81
7104	Shyrlok keyless, ¼ in. angle cap, short	25	100	20	71	1.74
7012	Shyrlok, pull, 1/4 in. cap.	25	100	20	.96	2.35
7023	Shyrlok, pull, ¼ in. angle cap.	25	50	16	1.01	2.47
	pan, 74 m ungio cup		1 00	10	1.01	1 2.1
	WITH 3/8 INCH CAP				Schedul	e "B"
7004	Key, single pole, 3/8 in. cap	25	250	50	\$0.39	\$0.96
7005	Keyless, 3/8 in. cap, short	25	250	45	.36	.88
7024	Key, single pole, 3/8 in. angle cap	25	100	20	.44	1.08
7105	Keyless, 3/8 in. angle cap, short	25	100	20	.41	1.00
7007	Pull, 3/8 in. cap	25	100	20	.66	1.62
7026	Pull, 3/8 in. angle cap	25	50	16	.71	1.74
	<u> </u>	•				
					Sch <b>e</b> dul	le "L"
7004	Sharlok key, single pole, 3% in. cap	25	100	25	\$0.66	\$1.62
7005	Shyrlok keyless, ¾ in. cap, short. Shyrlok key, single pole, ¾ in. angle cap	25	100	25	.63	1.54
7024	Sharlok key, single pole, 3% in. angle cap	25	100	20	.71	1.34
7105	Shyrlok, keyless, 3/8 in. angle cap, short	25	100	20	68	1.67
7007	Shyrlok pull, 3/8 in. cap.	$\widetilde{25}$	100	20	.93	2.28
7026	Shyrlok pull, % in angle cap.	25	50	16	.98	2.40
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National Code Standard.

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### MOGUL BASE SOCKETS AND RECEPTACLES







P & S 597 Shyrlok



P & S 429
(¼ Full Size)
Socket with ¾ Inch Cap
and 3½ Inch Shade Holder
P & S 243
(¼ Full Size)
Porcelain Weatherproof Socket





P & S 521

## Mogul or Goliath Lamp Base Devices 1500 Watts, 660 Volts

List No.	Description	Schedule	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
520	Porcelain, keyless cleat	В	1	50	50	\$0.75	\$1.80
597	Porcelain, Shurlock, 3/8 in. brass cap.	L	2	50	65	1.27	3.04
596	Porcelain, Shurlok, 1/2 in. brass cap	L	2	50	65	1.27	3.04
541	Porcelain, Shurlok, % in, brass cap	L	2	50	65	1.27	3.04
429	Porcelain, keyless, 3/8 in. cap, with 3/4 in. shade holder	В	1	50	48	1.80	4.32
441	Porcelain, keyless, 1/2 in. cap, with 3/4 in. shade holder	В	1 .	50	40	1.80	4.32
429	Porcelain, Shurlok, keyless, 3% in. cap, with 34 in. shade holder	L	1	50	48	2.15	5.16
441	Porcelain, Shurlok, keyless, 1/2 in. cap with 3/4 in. shade holder	L	1	50	50	2.15	5.16
216	Brass, keyless, ½ in. cap Brass, keyless, ½ in. cap	В	10	50	34	1.50	3.60
433	Brass, keyless, ½ in. cap	В	10	50	35	1.50	3.60
216	Brass, Shurlok, keyless, % in. cap	L	10	50	34	1.85	4.44
433	Brass, Shurlok, keyless, 1/2 in. cap	L	10	50	35	1.85	4.44
455	Porcelain, weatherproof, 1/2 in. brass cap.  Porcelain, weatherproof, 1/2 in. brass cap.	B	10	50	65	1.00	2.40
243	Porcelain, weatherproof, ½ in. brass cap	В	10	50	65	1.00	2,40
591	Porcelain, weatherproof, 34 in. brass cap	В	10	50	65	1.00	2.40
577	Porcelain, weatherproof, % in. cast iron yoke	В	10	50	65	.85	2.04
589	Porcelain, weatherproof, 1/2 in. cast iron yoke	В	10	50	65	.85	2.04
590	Porcelain, weatherproof, ¾ in. cast iron yoke	В	10	50	65	.85	2.04
522	Porcelain, 3/8 in. brass cap	B	10	50	60	.85	2.04
521	Porcelain, 1/2 in. brass cap	В	10	50	65	.85	2.04
592	Porcelain, 34 in. brass cap	В	10	50	60	.85	2.04
593	Porcelain, 3/8 in. cast iron yoke	В	10	50	60	.70	1.68
594	Porcelain, 1/2 in. cast iron yoke	В	10	50	60	.70	1.68
595	Porcelain, 3% in. cast iron yoke	В	10	50	60	.70	1.68



P & S 517



P & S 1183



P & S 523



P & S 524

### Mogul Porcelain Sockets

List No.	Description	Schedule	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. Liet Each
519 518 517 1183 1184 1185 523 524 525	With % in. brass cap, long skirt. With ½ in. brass cap, long skirt. With ½ in. brass cap, long skirt. With ¾ in. cast iron yoke, long skirt. With ¾ in. cast iron yoke, long skirt. With ¾ in. cast iron yoke, long skirt. Without cap, long skirt. Without cap, short skirt. Without cap, short skirt.	B B B B B	2 2 2 2 2 2 2 10	50 50 50 50 50 50 50 50 50	70 70 70  55 50 55	\$1.00 1.00 1.00 .85 .85 .85 .70 .55	\$2.40 2.40 2.55 2.55 2.55 1.65 1.85 1.85

## P & S SWITCH ROSETTES

### FLUTO INTERCHANGEABLE SHELLS





No. 700

# Ceiling Pull Switch Rosettes

3 Amperes, 125 Volts—1 Ampere, 250 Volts

Schedule "XA"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
700 711 709 710 712 707 706 708 705	With base to use on 3¼ in. outlet boxes. With base to use on 3¼ or 4 in. outlet boxes. With 3¼ in. brass covered concealed base. With 4½ in. brass covered concealed base. With small concealed brass covered base. With standard slotted porcelain base. With standard porcelain concealed base. With large concealed work porcelain base. With base for open surface wiring.	1 1 1 10 5 5 5	25 20 25 20 20 25 25 20 25 25	28 30 25 30 15 17 17 20 25	\$0.90 1.20 .90 1.20 .81 .71 .71 .76 .76	\$2.16 2.88 2.16 2.88 1.94 1.70 1.70 1.82 1.82

Complete with 10 feet of cord.



No. 720



No. 719

# Fuseless Rosettes

Schedule "XA"

723 724 721 722 719 714 713 720 718	With base to use on 3¼ in. outlet boxes. With base to use on 3¼ or 4 in. outlet boxes. With 3¼ in. brass covered concealed base. With 4½ in. brass covered concealed base. With small concealed brass covered base. With standard slotted porcelain base. With standard porcelain concealed base. With large concealed work porcelain base. With base for open surface wiring.	1 1 1 10 10 10 10 10	20 50 20 50 20 20 20 20 20	17 40 17 40 14 14 14 12 14	\$0.50 .80 .50 .80 .41 .31 .31 .36	\$1.20 1.92 1.20 1.92 .98 .74 .74 .86
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## P & S CEILING PULL SWITCH ROSETTE FLUTO INTERCHANGEABLE SHELL









Cast Brass Screw Pullev

Schedule "XA"

28

20

.90

	<u> </u>				Schedule		
List No.	Description	Carton Quantity	Std. Pkg.	Wt. Lbs.	Mfrs. List Each	W. E. List Each	
493	Polished Brass	100	100	15	\$0.14	\$0.33	

	Pull Switches 3 Amperes, 125 Volts—1 Ampere, 25	0 Volts			Schedul	e "XA"
725	With ½ in. cap	10	20	15	\$0.60	\$1.44
726	With 1/4 in. cap	10	20	15	.69	1.66
<b>727</b> ·	With 3/8 in. cap	10	20	15	.66	1.58
728	With pendent cap	10	20	15	.60	1.44
729	With 3/8 in. male thread cap		20	15	. 69	1.66

Each switch supplied with 10 feet of best linen cord complete with black acorn.

		3 Amperes, 125 Volts—1 Ampere,	250 Vo	lts	1	Schedule	e "XA"
3030		1/8 in. cap	10	50	25	(\$0.75)	\$1.80
3031		¼ in. cap	10	20	17	.84	2.00
3032		3/8 in. cap	10	20	17	.81	1.94
3033	4	3/8 in. male cap	10	20	17	.84	2.00
3034		1/8 in. fixture cap	10	20	17	.81	1.94
3035		1/4 in. fixture cap	10	20	17	.84	2.00
3036		1/8 in. angle cap	10	20	17	.80	1.92
3037	4.0	1/4 in. angle cap	10	20	17	.89	2.13
3042	0	3/8 in. angle cap	10	20	17	.86	2.06
3038		1/8 in. angle fixture cap	10	20	17	.86	2.06
3039	11.7	1/4 in. angle fixture cap	10	20	17	.89	2.13
3040		Pendent cap	10	20	15	.75	1.80
3041	-	Strain relief cap	10	20	15	.75	1.80
		CEILING PULL SWITCH	-				
3003		1/8 in. cap	10	1 50	30	\$0.60	\$1.44
3004		1/4 in. cap	10	20	15	69	1.66
3005		3/8 in. cap	10	20	15	.66	1.58
3006		Pendent cap	10	20	15	.60	1.44
3007		3/8 in. male thread cap	10	20	15	.69	1.66
3008		Standard porcelain concealed base	10	20	17	.71	1.70
3009		Standard slotted porcelain base	10	20	17	.71	1.70
3013		Base for open surface wiring	10	20	25	.76	1.82
3014		Large concealed porcelain base	10	20	20	.76	1.82
3015		Small concealed brass covered base	10	20	15	.81	1.94
3016	- 16	Medium brass covered base	1	20	25	.90	2.16
3017		Large brass covered base	1	20	30	1.20	2.88

List No.	Base	Screws Spaced	Outside Diameter Base	Carton	Std. Pkg.	Mfrs. List Each	W. E. List Each
713	Standard porcelain, plain	1½ ins.	$2\frac{1}{16}$ ins.	10	20	\$0.31	\$0.74
714 718	Standard porcelain, slotted Porcelain, for open surface wiring	11/8 ins. 21/8 ins.	$2\frac{1}{16}$ ins. $3\frac{7}{8} \times 2\frac{3}{4}$ ins.	10	20 20	.31	.74

Each switch is supplied with ten feet of linen cord complete with black acorn, and short chain.

Wiring Devices 100-1

3¼ in. box base..... 4 in. box base

3018

3019

# P & S WALL RECEPTACLES









Interchangeable Fluto Receptacles

Sc	hed	lula	. "	в"

List No.	Description	Screws Spaced	Carton	Std. Pkg.	Pkg. Wt.	Mfrs. List Per 100	W. E. List Each
61387* 617* 60387* 98*	Key, standard porcelain base. Key, 680 watts, standard porcelain base. Keyless, standard porcelain base. Pull, standard porcelain base	1 ½ 1 ½ 1 ½ 1 ½ 1 ½	10 10 10 10	250 250 250 250 100	115 115 105 46	\$44.00 47.00 41.00 71.00	\$1.06 1.13 .98 1.70
						Schedu	le "L"
61387 <b>^</b> 617 <b>^</b> 60387 <b>^</b> 98,	Shurlok key, standard porcelain base Shurlok key, 660 watts, standard porcelain base Shurlok keyless, standard porcelain base Shurlok pull, standard porcelain base	1 1/8 1 1/8 1 1/8 1 1/8	10 10 10 10	100 100 100 46	46 46 46	\$71.00 74.00 68.00 98.00	\$1.70 1.78 1.63 2.35
			•			Schedu	le "B"
132* 618* 146* 129*	Key, slotted porcelain base Key, 660 watts, slotted porcelain base Keyless, slotted porcelain base Pull, slotted porcelain base	1 1/8 1 1/8 1 1/8 1 1/8	10 10 10 10	250 250 250 250 100	108 108 105 46	\$44.00 47.00 41.00 71.00	\$1.06 1.13 98 1.70
						Schedu	ie ''L''
132 <sup>4</sup> 618 <sup>4</sup> 146 <sup>4</sup> 129 <sup>4</sup>	Shurlok key, slotted porcelain base Shurlok key, 660 watts, slotted porcelain base Keyless, slotted porcelain base Pull, slotted porcelain base	1 1/8 1 1/8 1 1/8 1 1/8	10 10 10 10	100 100 100 100	46 46 42 46	\$71.00 74.00 68.00 98.00	\$1.70 1.78 1.63 2.35







P & S 4535



P & S 61455



"Schedule "B"

# Interchangeable Fluto Receptacles

			_				
List No.	Description	Screws Spaced	Carton	Std. Pkg.	Pkg. Wgt.	Mfrs. List Per 100	W.E. List Each
7534 ^ 613 ^ 7535 ^ 4535 ^	Key, base for surface wiring Key, 660 watts, base for surface wiring Keyless, base for surface wiring Pull, base for surface wiring.	21/8 21/8 21/8 21/8	10 10 10 10	250 250 250 250 100	146 146 143 69	\$49.00 52.00 46.00 76.00	\$1.18 1.25 1.10 1.82
						Schedu	le "L"
7534 ^ 613 ^ 7535 ^ 4535 ^	Shurlok key, base for surface wiring. Shurlok, 660 watts, base for surface wiring. Shurlok keyless, base for surface wiring. Shurlok pull, base for surface wiring.	21/8 21/8 21/8 21/8	10 10 10 10	100 100 100 100	60 60 60 69	\$76.00 79.00 73.00 103.00	\$1.82 1.90 1.75 2.47
		_			-	Schedul	• "B"
614554 6154 614564 994	Key, porcelain angle wall base Key, 660 wats, porcelain angle wall base Keyless, porcelain angle wall base Pull, porcelain angle wall base	1 1/8 1 1/8 1 1/4 1 1/4	10 10 10 10	100 100 100 50	58 · 58 56 34	\$49.00 52.00 46.00 76.00	\$1.18 1.25 1.10 1.82
				•		Schedu	e "L"
61455 <sup>4</sup> 615 <sup>4</sup> 61456 <sup>4</sup> 99 <sup>4</sup>	Shurlok key, porcelain angle wall base Shurlok, 660 watts, porcelain angle wall base Shurlok keyless, porcelain angle wall base Shurlok pull, porcelain angle wall base.	1 1/8 1 1/8 1 1/8	10 10 10 10	100 100 100 50	58 58 56 34	\$76.00 79.00 73.00 103.00	\$1.82 1.90 1.75 2.47

## P & S RECEPTACLES



Fig. 3 View showing Outlet Box Recep-tacle mounted on Fixture Stud by means of P & S Conduit Box Strap No. P & S 1180



P & S 1179



Fig. 4
View showing P & S Wall Receptacle mounted on Conduit Box
without Stud, by means of
Conduit Box Strap
P & S 1180

# P & S Conduit Box Strap

Schedule "XA"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
1179	With 3/8 in. lock nut	25	100	14	\$0.05	\$0.12
1182	With $\frac{1}{2}$ in. lock nut	25	100	14	.05	.12
1180	With $\frac{3}{8}$ in. lock nut	25	100	17	.07	.17
1181	With ½ in. lock nut	25	100	17	.07	.17

## P & S Conduit Clamps

1401	For ½ in. conduit	25	250	<b>3</b> 0	\$0.05	\$0.12
1402	For 3¼ in. conduit	25	250	40	.07	. 17
1403	For 1 in. conduit	25	100	20	.09	. 22
1404	For 11/4 in. conduit	25	100	20	.11	. 26
1405	For 1½ in. conduit	25	100	37	. 13	. 31



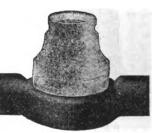
P & S 46 (% Full Size)



P & S 82 (4 Full Size)



P & S 61670



P & S 88259 (¾ Full Size)

# Porcelain Wall Receptacles

Schedule "B"

List No.	Description	Screw Spaced	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
46	Key, for 31/4 in. outlet boxes	23/4	1	100	95	\$0.45	\$1.08
4	Keyless, for 31/4 in outlet boxes	23/4	1	100	92	.40	.96
82	Key, for 4 in. outlet boxes	31/2	1	100	152	. 50	1.20
83	Keyless, for 4 in. outlet boxes	$3\frac{1}{2}$	1	100	149	. 45	1.08

#### Receptacle for Molding or Conduit Fittings Schedule "B"

61670   With shade holder groove	$2\frac{9}{32}$		250	100	\$0.30	\$0.72
61770   Without groove	$2\frac{9}{32}$	10	250	100	.25_	. 60

# Special Concealed Porcelain Receptacles

88259   With shade holder groove	138	10 10	250	107 114	\$0.30 25	\$0.72 .60
Wiring Devices 10	16	Digitiz	ed by	יַטט	gic	

# Western Electric

# P & S OUTLET BOX RECEPTACLES









P & S 97

P & S 413

P & S 421

	P & S W.	ALL REC	EPTACL	ES		Sched	ule "B"
List No.		Screws Spaced In.	Carton	Std. Pkg.	Pkg. Wgt.	Mfrs. List per 100	W. E. List Each
62350	Key, used on 31/4 in. outlet box		1	100	100	\$63.00	\$1.51
620	Key, 660 watts used on 31/4 in. outlet box	23/4	1	100	100	66.00	1.58
62351	Keyless, used on 31/4 in. outlet box	23/4	1	100	96	60.00	1.44
97	Pull, used on 31/4 in. outlet box	23/4	1	50	50	100.00	2.40
						Sched	ule "L"
$62350 \\ 620$	Shurlok-key, used on $3\frac{1}{4}$ in. outlet box. Shurlok-key, 660 watts, used on $3\frac{1}{4}$ in.		1	100	100	\$90.00	\$2.16
	outlet box	23/4	1	100	100	93.00	2.23
62351	Shurlok keyless, used on 31/4 in. box	23/4	1	100	96	87.00	2.08
97	Shurlok pull, used on 31/4 in. outlet box.	23/4	1	50	50	127.00	3.05
THE RESERVE	of Englisher					Sched	ule "B"
421 622	Key, used on $3\frac{1}{4}$ in. or 4 in. outlet box. Key, 660 watts, used on $3\frac{1}{4}$ in. or 4 in.	31/4 x 4	1	100	180	\$93.00	\$2.19
	outlet box	31/4 x 4	1	100	180	96.00	2.30
414	Keyless, used on 31/4 in. or 4 in. box	31/4 x 4	1 =	100	176	90.00	2.12
413	Pull, used on 31/4 in. or 4 in. outlet box	31/4 x 4	1	50	90	130.00	3.12
ABULE .						Sched	ule "L"
421 622	Shurlok key, used on $3\frac{1}{4}$ in. or 4 in. box. Shurlok, 660 watts, used on $3\frac{1}{4}$ in. or 4 in.		1	100	180	\$120.00	\$2.88
414	Shurlok keyless, used on 3½ in. or 4 in.	3¼ x 4	1	100	180	123.00	2.95
480	outlet box	31/4 x 4	1	100	176	117.00	2.80
413	Shurlok pull, used on 31/4 in. or 4 in. box.		1	50	90	157.00	3.77









P&S7 P&S149

P & S 42

	P & S WALL	RECEPT	<b>TACLE</b>	S		Sched	ule "B"
List		Screws	Carton	Std.	Pkg.	Mfrs. List	W. E. List
No.		Spaced Ins.	Carton	Pkg.	Wgt.	per 100	Each
$\overline{7}$	Key, used on 31/4 in. outlet boxes	$2\frac{3}{4} \times 2\frac{5}{16}$	1	100	$-102^{-}$	\$63.00	\$1.51
621	Key, 660 watt, used on 31/4 in. outlet boxes.	$2\frac{3}{4} \times 2\frac{5}{16}$	1	100	102	66.00	1.58
1	Keyless, used on $3\frac{1}{4}$ in outlet boxes		1	100	-98	60.00	1.44
128	Pull, used on 3¼ in. outlet boxes	$2\frac{3}{4} \times 2\frac{5}{16}$	1	50	55	100.00	2.40
						Sched	ule "L"
7	Shurlok key, used on 31/4 in. outlet boxes	23/4 x 2 5	1 1	100	102	\$90.00	\$2.16
621	Shurlok key, 660 watt, used on 31/4 in. boxes	$2\frac{3}{4} \times 2\frac{5}{16}$	1	100	102	93.00	2.23
1	Shurlok keyless, used on 31/4 in. outlet boxes	$2\frac{3}{4} \times 2\frac{5}{16}$	1	100	98	87.00	2.08
128	Shurlok pull, used on 31/4 in. outlet boxes	$2\frac{3}{4} \times 2\frac{5}{16}$	1	50	55	127.00	3.05
						Sched	ule "B"
42	Key, used on 31/4 in. or 4 in. outlet boxes		1	100	180	\$93.00	\$2.23
623	Key, 660 watt, used on $3\frac{1}{4}$ in. or 4 in. boxes			100	180	96.00	2.30
44	Keyless, used on 31/4 in. or 4 in. outlet boxes	$2\frac{3}{4} \times 3\frac{1}{2}$	1	100	176	90.00	2.16
149	Pull, 18 in. chain, used on 31/4 in. or 4 in. boxes	$2\frac{3}{4} \times 3\frac{1}{2}$	1	50	90	130.00	3.12
						Sched	ule "L"
42	Shurlok key, used on 3¼ in. or 4 in. boxes.	$2\frac{3}{4} \times 3\frac{1}{2}$	1	100	180	\$120.00	\$2.88
623	Shurlok key, 660 watt, used on $3\frac{1}{4}$ in. or 4		l				•
	in. outlet boxes	$2\frac{3}{4} \times 3\frac{1}{2}$	1	100	180	123.00	2.95
44	Shurlokkeyless, used on 31/4 in. or 4 in. boxes	$2\frac{3}{4} \times 3\frac{1}{2}$	1	100	176	117.00	2.80
149	Shurlok pull, 18 in. chain, used on 31/4 in. or		Ι,		$C_{00}$	hale !	
	4 in. outlet boxes	23/4 x 31/5	1 1	)igiti <b>sm</b> i bi	90	157.00	3.77
	10	4					

# P & S OUTLET BOX RECEPTACLES







No. 1010

No. 428

P & S 288

	FOR 3 OR 31/4 II	исн во	XES		Sched	ule "A"
List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt.	Mfrs. List per 100	W. E. List Each
1009 85	Keyless, with binding posts.  Keyless, with wires.		100 100	75 lbs. 100 lbs.	\$45.00 50.00	\$1.08 1.20
	FOR 3, 31/4 OR 4 IN	сн вох	ES		Sched	ule "A"
10 1010 78 428	Keyless, projecting back Keyless, with binding posts. Keyless, with wires Double break chain pull.	1	100 100 100 50	134 lbs. 110 lbs. 120 lbs. 67 lbs.	\$60.00 60.00 65.00 130.00	\$1.44 1.44 1.56 3.12
	FOR 3¼ INC	H BOX	ES		Sched	ule "A"
288▲ 442▲	Complete with $3\frac{1}{2}$ brush brass cover. Complete with $3\frac{1}{2}$ japanned iron cover. Holes for cover are spaced $2\frac{3}{4}$ inches on centers	1	100 100	81 lbs. 81 lbs.	\$40.00 30.00	\$0.96 .72
	FOR 4 INCH B	OXES			Sched	ule "A"
289 <sup>4</sup> 443 <sup>4</sup>	Complete with 4 in. polished brass cover	1 1	100 100	100 lbs. 100 lbs.	\$45.00 32.00	\$1.08 .77



(% Full Size)



P & S 111 (¼ Full Size)



P & S 40 (1/2 Full Size)

Digitized by



P & S 122 (¼ Full Size)

#### FOR 3 OR 31/4 INCH BOXES

Sched	ule "A"
Mfrs.	W. E.

	100 300 3/4 11					
List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt.	Mfrs. List Each	W. E. List Each
2357 <sup>*</sup> 41 <sup>*</sup>	Keyless, with shade holder ring	1 1	100 100	95 lbs. 92 lbs.	\$35.00 40.00	\$0.84 .96
	FOR 4 INCH	BOXES			Sched	ule "A"
111 <sup>4</sup> 110 <sup>4</sup>	Keyless, without shade holder groove Keyless, with shade holder groove	1	100 100	124 lbs. 124 lbs.	\$45.00 50.00	\$1.08 1.20
	WEATHERPROOF, FOR 3 O 660 Watts-6			OXES	Schedi	ale "A"
109 <sup>4</sup>	Keyless, without shade holder groove	1 1	100 100	80 lbs. 92 lbs.	\$35.00 40.00	\$0.84 .96
	FOR 4 INCH	BOXES	3		Sched	ule "A"
121▲ 122▲	Keyless, without shade holder groove		100 100	115 lbs. 115 lbs.	\$50.00 55.00	\$1.20 1.32

<sup>\*</sup>National Electrical Code Standard.

# P & S RECEPTACLES Sign and Outlet Box Receptacles











P & S 427

P & S 86

	FOR METAL SIGNS AND O	UTLET I	BOXES	5	Sched	ule "C"
List No.	Description	Carton   Quantity	Std. Pkg.	Pkg. Wgt.	Mfrs. List Each	W.E. List Each
427	With ring and gasket complete	25	250	77 lbs.	\$9.20	\$0.48
102704	With ring and gasket complete	25	250	80 lbs.	.25	.60
	Punch required for this receptacle is 1½ ins. in diameter.					
864	With ring and gasket complete.  Wrench supplied in each box for tightening ring.  The front of this receptacle is practically flush with the face of the sign, and may be painted to match the sign. The ring is made of non-corrosive	25	250	92 lbs.	.20	.48
	gilder's metal, rich in copper.  Punch required for this receptacle is 15% ins. in diameter.					- 1 = 1
61988	With ring and gasket complete	25	250	80 lbs.	.20	.48
4974	With mide ning and maket complete	95	250	90 lba	20	10

Shade holder P & S 84 may be used.







P & S 464



## **DECORATIVE SOCKETS**

Mfrs. List	W.E. List
Each	Each
\$0.24	\$0.58

Schedule "B"

L st No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wgt.	Mirs. List Each	Each
61417	Temporary socket, porcelain	10	250	95 lbs.	\$0.24	\$0.58
	ture the insulation and make contact with the con-	ļ				
	ductor.  We recommend the use of rubber covered					
	stranded wire with this receptacle.		.,			
464	Temporary socket, mica composition	10	250_	82 lbs.	. 30	. 72

#### S STISDENSION OF FATS

	For Ready Wired So		•		Schedul	e "XA"
430 <sup>4</sup> 291 <sup>4</sup>	Cleat, to carry wires 3/4 in. apart	100 100	100	14 lbs. 25 lbs.	\$0.07 .12	\$0.17 .29
Net	ional Electrical Code Standard. Illustrations are 3/	of full	<b>size</b> itized	by GO	OSIC	

## Western Electric

# P & S RECEPTACLES

# Sign and Outlet Box Receptacles







P & S 61777

P& S 61072

#### FOR METAL SIGNS AND OUTLET BOXES

Schedule "C"

List	Description	Carton	Std.	Pkg.	Mfrs. List	W.E. List
No.		Quantity	Pkg.	Wgt.	Each	Each
61977 <b>^</b>	With fastening screws complete	25	250	70 lbs.	\$0.17	\$0.41
61777 <b>^</b>		25	250	75 lbs.	.17	.41

The punch required for these receptacles is 1\% inches in diameter. See pages elsewhere for list of outlet box covers which may be used with these receptacles.

#### FOR WOOD SIGNS

Schedule "C"

61072	With 1 in. skirt, screws are spaced 11 ins. on	l	1	1		
	centers	25	250	65 lbs.	<b>\$</b> 0.14	\$0.34

The hole required for these receptacles is  $1\frac{1}{2}$  inches in diameter.



P & S 54



P & S 900



P & S 677



P & S 779

#### FOR METAL SIGNS AND OUTLET BOXES

Schedule "C"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wgt.	Mfrs. List Each	W.E. List Each
54*	With fastening screws complete The punch required for this receptacle is 13/8 ins. in diameter.	25	250	75 lbs.	\$0.14	\$0.34
900*	Sign receptacle. The punch required is $1\frac{1}{2}$ ins. in diameter.	25	250	75 lbs.	.20	.48
878	Candelabra base, with ring and rubber gasket  The punch required for this receptacle is $\frac{25}{32}$ in in	25	250	22 lbs.	.17	.41
677▲	diameter. Candelabra base, complete, with fastening screws. The punch required for this receptacle is $\frac{25}{32}$ in. in	25	250	30 lbs.	.16	.38
7704	diameter.  Holes for supporting screws are spaced 1 <sup>3</sup> / <sub>16</sub> ins. on centers.  Candelabra base, complete, with fastening screws.	25	250	20 lbs.	.16	.38
	The punch required for this receptacle is $\frac{25}{32}$ in. in diameter.  Holes for supporting screws are spaced $1\frac{3}{16}$ ins. on centers.	20	250	20 10s.	.10	

# P & S ROSETTES AND FIXTURE LOOPS



No. 1174



With Brass Cap



**Outlet Box Cover Rosettes** 

Schedule "XA"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wgt.	Mfrs. List per 100	W. E. List Each
1174	Porc. rosette for use on 3¼ in. outlet box only Complete with brass terminals.	10	100	60 lbs	\$20.00	\$0.48
1175	Porc, rosette for use on 4 in. outlet box only Complete with brass terminals	5	100	105 lbs	27.00	. 65
200	Fuseless, for 3, 3¼ or 4 inch box	1	50	75 lbs	80.00	1.92
112*	Fuseless, for 3, 3½ or 4 inch box	1	50	72 lbs	80.00	1.92
	brush brass. All other finishes take the same advance as for the standard sockets.					
1172 <sup>*</sup> 1173 <sup>*</sup>	Fuseless, for 3 inch box	10 5	100 100	60 lbs 98 lbs	10.00	.24

See data pages for list of outlet boxes which may be used with the above rosettes.



Chain Pendent Fixture



**Cord Pendent** 



P & S 1171



No. 1214 Canopy Rosette

# P & S Fixture Loops

Schedule "SM"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wgt.	Mfrs. List per 100	W. E. List Each
1170	Threaded shank 1/8 inch, to fit 1/8 inch cap socket.	50	100	14 lbs	\$11.00	\$0.26
1171	Threaded shank % inch, with hexagon nut	50	100	15 lbs	13.00	.31

No. 1214 Canopy Rosette Schedule "SA" Flush back deep Canopy Rosette...... Fits 3 or 4 inch outlet boxes 1214 75 lbs. \$80.00 \$1.92 50

Brush brass is the regular finish. There is no extra charge for polished or old brass finish. Brush brass is the regular mass. A new is no case.

For all other finishes advance the list 4 cents.

National Electrical Code Standard. Illustrations are 3/6 of full size.

National Electrical Code Standard. Illustrations are 3/6 of full size.

Wiring Devices

# P & S SOCKETS AND RECEPTACLES Porcelain-Interchangeable











P & S 61317

P & S 61227

P & S 488

P & S 1218

The body of the "interchangeable" line is held to the base and cap by the one contact screw.

The interchangeable line is very convenient for filling rush orders. For example: you have in stock a quantity of P & S 01217 and 435. You receive an order for 60217 and have none in stock; by changing the cap from 61217 to 435 and from 435 to 61217 you will have 60217 keyless socket to fill the order, leaving in stock No. 434 key socket.

Schedule "B"

List	Description .	Carton	Std.	Pkg.	Mfrs. List	W. E. List
No.		Quantity	Pkg.	Wgt.	Each	Each
61217 <b>^</b>	Key, all porcelain, with pendent cap	10	250	104	\$0.30	\$0.72
60217 <b>^</b>	Keyless, all porcelain, with pendent cap	10	250	88	.25	.60
61317 <sup>4</sup> 60317 <sup>4</sup>	Key, all porcelain, with pendent cap	10	250 250	108 92	\$0.30 .25	\$0.72 .60
61227 <b>^</b>	Key, polished brass cap, with ½ in. cap	10	100	52	\$0.35	\$0.84
60227 <b>^</b>	Keyless, polished brass cap, with ½ in. cap	10	100	38	.30	.72
488▲ 448▲	Key, porcelain socket, $\frac{3}{8}$ in. aluminum cap   Keyless	100	100	43 39	\$0.50 .45	\$1.20 1.08
1218	Key, ¾ in. brass angle cap. Keyless, ¾ in. brass angle cap. Key, ¾ in. aluminum angle cap. Keyless, ¾ in. aluminum angle cap.	10	100	37	\$0.40	\$0.96
1219		10	100	35	.35	.84
1220		10	100	25	.55	1.32
1221		10	100	23	.50	1.20







P & S 61327



P & S 485



P & S 1222

#### Schedule "B"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wgt.	Mfrs. List Each	W. E. List Each
434 <b>^</b> 435 <b>^</b>		10 10	100 100	52 38	\$0.38 .33	\$0.91 .79
61327 <b>4</b> 60327 <b>4</b>		10	100	52 38	\$0.35 .30	\$0.84 .72
485 <sup>4</sup> 241 <sup>4</sup>		10 10	100	38 38	\$0.50 .45	\$1.20 1.08
1222 1223	Key, ½ in. aluminum angle cap   Keyless, ½ in. aluminum angle cap	10	100	26 24	\$0.55 .50	\$1.32 1.20
Wiring	Devices 111		igitized b	y GC	ogle	

# P & S SOCKETS & RECEPTACLES

# Porcelain -- Interchangeable



P & S 100136



P & S 61237

## RECEPTACLE WITH MOLDING BASE

For Use with Wood Molding

Schedule "B"

List	Description	Carton	Std.	Pkg.	Mfrs. List	W.E. List
No.		Quantity	Pkg.	Wgt.	Each	Each
100136▲ 426▲	Key, with molding base  Keyless, with molding base  Holes for supporting screws are spaced 1 1/2 inches on centers.  Shade holder P & S 119 or 1190 may be used.	10 10	100 100	50 lbs 48 lbs	<b>\$0.34</b> .29	\$0.82 .70

#### SOCKETS WITH CONCEALED WALL BASE Schedule "B" 612374 Key, with concealed base. . . . . 10 100 45 lbs \$0.34 \$0.82 60237\* Keyless, with concealed base.... 10 100 33 lbs .29 .70 612504 Keyless, without shade holder groove..... Shade holder P & S 119 and 1190 may be used .25 10 100 45 lbs .60 with the first two numbers.



P & S 62247



P & S 61087

# PORCELAIN RECEPTACLES

Interchangeable

S	cł	۱e	du	le '	"B	,,

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wgt.	Mfrs. List Each	W. E. List Each
62247 <sup>4</sup> 490	Key, with concealed wall base Keyless, with concealed wall base, without shade	10	100	62 lbs	\$0.25	\$0.60
	holder groove	10	250	157 lbs	.29	.70
60247▲	Keyless, with concealed wall base Shade holder P&S 119 or 1190 may be used. Holes for supporting screws are spaced 21/4 inches on centers.	10	100	59 lbs	.34	.82
61087 <b>^</b> 61107 <b>^</b>	Key, with cleat wall base	10 10	100 100	48 lbs 45 lbs	.29	.70 .60

Note: See pages elsewhere for list of outlet boxes which may be used with receptacles listed on this page.

A National Electrical Code Standard. Illustrations are 3% of full size.

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Wiring Devices

## P & S SOCKETS



No. 7001





# Flutolier Keyless Socket

Schedule "B"

List	Description	Carton	Std.	Pkg.	Mfrs. List	W. E. List
No.		Quantity	Pkg.	Wgt.	Each	Each
7000 <b>7001</b>	Flutolier Key Single Pole, ½ in. cap Flutolier Keyless, ½ in. cap	$\begin{array}{c} 25 \\ 25 \end{array}$	500 100	105 lbs. 25 lbs.		\$0.79 1.37

### Flutolier Pull Socket 5hvrlok

Schedule "L"

7000	Sharlek, Flutolier Key S.P., 1/8 in. cap	25	100	25 lbs.	\$0.60	\$1.44
7001	Shyrlek. Flutolier Keyless, 1/8 in. cap	25	100	25 lbs.	1.37	.57



P & S 50717 (¾ Full Size) Keyless Bayonet Shell



P & S 108 (3/8 Full Size) Keyless with Slotted Base Bayonet Shell



P & S 68136 With Brass Covered Base



# Wall Receptacles

Schedule "B"

List	Description	Carton	Std.	Pkg.	Mfrs. List	W. E. List
No.		Quantity	Pkg.	Wgt.	Each	Each
50717 <sup>4</sup>	Keyless, with porcelain base.  Keyless, with slotted porcelain base.  Holes for supporting screws are spaced 1¼ ins. on centers. Outside diameter of base 2 inches.	25	250	60 lbs.	\$0.25	\$0.60
108 <sup>4</sup>		25	250	60 lbs.	.25	.60
68136 68137	Key receptacle Fluto shell with brass covered base. Keyless receptacle Fluto shell with brass covered	10	250	105 lbs.	.54	1.29
68138	base. Pull receptacle Fluto shell with brass covered base. Holes for supporting screws are spaced 1¾ ins. on centers. Outside diameter of base 3 ½ inches.	10 10	250 100	. 100 lbs. 38 lbs.	.51 .81	1.22 1.94

Brush brass is the regular finish. There is no extra charge for polished or old brass finish.

<sup>▲</sup> National Electrical Code Standard.

# P & S PORCELAIN RECEPTACLES Metal Molding and Cleat Receptacles







P & S 61770



P & S 520

#### FOR USE WITH WOOD MOLDING

#### Schedule "B"

List No.	Description	Screws Spaced	Carton Quantity	Std. Pkg.	Pkg. Wgt.	Mfrs. List per 100	W. E. List Each
61670▲	With shade holder groove	$2\frac{5}{16}$	10	250	100 lbs.	\$30.00	\$0.72
61770*	Without shade holder groove		10	250	100 lbs.	25.00	. 60

# For Extra Large Edison Base

1500 WATTS-600 VOLTS

Schedule "B"

520   Without shade holder groove   27/8   10   50   50 lbs.   \$75.0	00   \$1	. 80



P & S 61971



P & S 50715



P & S 62358

#### **CLEAT RECEPTACLES**

#### Schedule "B"

List. No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wgt.	Mfrs. List per 100	W. E. List Each
61971	With inclosed terminal	10	250	140 lbs.	\$25.00	\$0.60
	inches on centers.		İ	ĺ		
	Wires are carried 1 inch from surface and 21/2		1			
	inches apart. Drain holes are provided in the bottom of the receptacle.			}		
	Used extensively in amusement parks and all		i			•
	outdoor electrical decorating.					
50715▲	Pony, without shade holder groove	10	250	82 lbs.	15.00	.36
,	Holes for supporting screws are spaced 11/16					
	inches on centers.  This receptacle will fit a pony receptacle condulet					
	cover made by Crouse-Hinds, which is used with ½.		1			
	34 and 1 inch types S, SV, SL, ST and SX condulets.					
62358*	With 1 inch base	10	250	103 lbs.	18.00	.43
	Holes for supporting screws are spaced 11% inches on centers.					

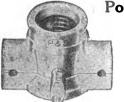
# PORCELAIN CLEAT RECEPTACLES

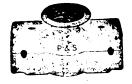
#### Schedule "B"

4013 <sup>A</sup> With shade holder groove	10			\$20.00 15.00	
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# P & S SOCKETS AND RECEPTACLES

Porcelain Sockets and Receptacles







P & S 66612 PORCELAIN CLEAT RECEPTACLES

P & S 64369 Schedule "B"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wgt.	Mfrs. List per 100	W. E. List Each
5▲	Key, with enclosed terminals	1	100	65 lbs	\$40.00	\$0.96
66612▲	With enclosed terminals	10	250	117 lbs	30.00	. 72
64369▲	With enclosed terminals	10	250	115 lbs	25.00	. 60



P & S 423



P & S 1161/2 PORCELAIN FIXTURE SOCKETS





	PORCELAIN FIXTURE S	DOCKET	•		Schedi	iie D
List No.	Description	Carton •Quantity	Std. Pkg.	Pkg. Wgt.	Mfrs. List per 100	W. E. List Each
423▲	Socket, with ½ inch aluminum cap	10	100	35 lbs	\$60.00	\$1.44
0116½ <b>^</b> 116½ <b>^</b>	Fixture socket, with ½ inch polished brass cap Fixture socket, with ¾ inch polished brass cap No extra charge for brush brass. All other finishes take one-half the advance for standard key sockets. Fixture sockets are fitted with 6 inches of No. 18 rubber covered fixture wire.	10 10	100 100	35 lbs 35 lbs	60.00 60.00	1.44 1.44

Sockets with longer wires furnished on special order. Extra wire \$0.11 list, to Mfrs. List \$0.045 per foot cach conductor.

Shade holder P & S 110 or 1100 may be used

	MINIATURE PORCELAIN	SOCK	ET		Schedule	"XA"
<del>4</del> 22 <b>▲</b>	Keyless receptacle or socket	50	250	21 lbs	\$25.00	\$0.60
	·				Schedu	ile "B"
186	Keyless 3 s inch cap, aluminum shell	10	50	23 lbs	\$50.00	\$1.20 1.20

A National Electrical Code Standard. Illustrations are 3/8 of full size.

## Western Electric

## P & S RECEPTACLES







P & S 372



P & S Receptacle 598



P & S Receptacie 599 Schedule "C"

#### FOR METAL SIGNS AND OUTLET BOXES

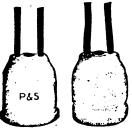
List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wgt.	Mfrs. List per 100	W. E. List Each
61577	With ring and gasket complete	10	250	114 lbs	\$28.00	\$0.67
61578▲	With ring and gasket completeBody glazed porcelain.	10	250	115 lbs	36.00	.86

These receptacles are fitted with 6 inches stranded No. 14 double braid New Code rubber covered wire. Receptacles with longer wires furnished to order. Extra wire, 9 cents list, per foot, each conductor.

#### 

#### FOR CONCEALED OR CLEAT WIRING

598   Without shade holder groove	
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P & S 80 Porcelain





P & S 43310 Molded Mica



P & S 540



P & S 60666 Composition

#### WEATHERPROOF SOCKETS

660 Watts-600 Volts

Schedule "B"

List	Description	Carton	Std.	Pkg.	Mfrs. List	W. E. List
No.		Quantity	Pkg.	Wgt.	per 100	Each
80 <sup>4</sup>	Porcelain, weatherproof socket	25	250	83 lbs	\$12.50	\$0.29
9366 <sup>4</sup>		25	250	90 lbs	20.00	.48
43310 <sup>4</sup>		10	100	28 lbs	22.00	.53
60666 <sup>4</sup>		10	250	96 lbs	24.00	.58
	rubber covered wire.		1			1

	CONDENSITE WEATHERPRO	OF SO	CKET	Schedu	le "L"
540	Shyrlok, with 6 inch wire	25	100   30 lbs.	\$75.00	\$1.80

43310<sup>4</sup> | Sharlek, Molded mica, weatherproof socket..... | 25 | 100 | 28 lbs | \$29.00 | \$0.70

# P & S ROSETTES P & S Porcelain Rosettes



P & S 400



P & S 390



P & S 390 P & S 810 LITTLE GEM CLEAT ROSETTES



P & S 1999 Schedule "XA"

Description	Carton Quantity	Std. Pkg.	Pkg. Wgt.	Mfrs. List Each	W. E. List Each
Fusible, two-piece	10 10	250 250	115 lbs 115 lbs	<b>\$</b> 0.16 .15	\$0.38 .36
LITTLE GEM CONCEALED	ROSET	TES		Schedu	le "XA"
Fusible, two-piece.  Fuseless, two-piece.  Holes for supporting screws are spaced 144 inches on centers.  This rosette will fit Crouse-Hinds condulets, types G, GL, GF, GX, H and HA 5 and 10 ampere size.	10 10	250 250	140 lbs 140 lbs	\$0.16 .15	\$0.38 .36
LITTLE GEM MOULDING	ROSET	TE		Schedu	le "XA"
Fusible, two-piece.  Fuseless, two-piece.  Holes for supporting screws are spaced 1½ inches on centers.	10 10	250 250	117 lbs 117 lbs	\$0.16 .15	\$0.38 .36
Fuseless cleat or concealed rosette	10	250	62 lbs	.08	.19
	Fusible, two-piece. Fuseless, two-piece. Holes for supporting screws are spaced 111 inches on centers.  LITTLE GEM CONCEALED  Fusible, two-piece. Fuseless, two-piece. Holes for supporting screws are spaced 111 inches on centers. This rosette will fit Crouse-Hinds condulets, types G, GL, GF, GX, H and HA 5 and 10 ampere size.  LITTLE GEM MOULDING  Fusible, two-piece. Fuseless, two-piece. Holes for supporting screws are spaced 11/4 inches on centers.	Fusible, two-piece	Pkg.   Quantity   Pkg.   Tusible, two-piece.   10   250	Pusible, two-piece.   10   250   115 lbs	Pusible, two-piece.

See pages elsewhere for list of outlet boxes, which may be used with these rosettes.



P & S 604



& S 610 P & S 607 CONCEALED ROSETTE



P & S 170 Schedule "XA"

1827

	OCIICA a					
W. E. List Each	Mfrs. List Each	Pkg. Wgt.	Std. Pkg.	Carton Quantity	Description	List No.
\$0.41 .26	\$0.17 .11	125 lbs 115 lbs	250 250	10 10	Fuseless, two-piece	604▲ 605▲
e "XA"	Schedu		:	ULDING	ROSETTE FOR WOOD MO	
\$0.41	\$0.17	55 lbs	250	10	Fuseless, two-piece	6104
e "XA"	Schedu			MINALS	WITH ENCLOSED TER	
\$0.41	\$0.17	81 lbs	250	25	Fuseless cleat, two-piece	607▲
				N	CEILING BUTTO	

## PLUG CURRENT TAPS AND ADAPTERS







No. 96

## Plug Current Taps

Schedule 3

Current Taps 95-96½ double the service from the standard socket. The regular use of the lamp is preserved, while the convenience of an extension cord is added. Standard finish is brushed brass.

Nos. 95-95½ have swivel shell by which they may be rotated to any desired position for leading out the

cord, and fixed at that point. A bead on the shell permits the transfer of any standard shade holder, and re-switch.

Nos. 96-96½ likewise have swivel shell, but have plug connection to facilitate the attaching and detaching of portable appliances. They have a lever switch, which in No. 96 turns the lamp on and off. The series form is adapted to the use of low voltage appliances with the lamp in series. This serves to cut down the voltage. By a throw of the switch the plug connection is cut out of the circuit, and the lamp left burning

#### WITH BINDING SCREW CONNECTIONS

List No.	Description	Std. Pkg.	Wt. Lbs.	Mfrs. List Price	W. E. List
95 ▲ 95½▲	Current Tap, multiple Current Tap, series	50 50	$\frac{9\frac{1}{2}}{9\frac{1}{2}}$	\$0.50 .50	\$0.90 .90
	WITH PLUG CONNECTIONS	AND SW	ITCH		
96 4 96½4 97 4	Current Tap, multiple	50	10 10 1½	\$0.80 .80 .25	\$1.44 1.44 .45



No. 922½ Two-light Adapter



No. 91 Socket Extension



No. 99 Tungsten Adapter

#### TWO-LIGHT ADAPTERS

Two-light Adapters 822-9221/2 are intended for doubling the outlets of a given socket, while adapting them for individual reflectors. They are furnished either with plug, wired, or with % inch bushing for stem, not wired. In the former case they are attached by means of a swivel shell. Outlets are at an angle of 14 degrees with the vertical. Adapters with lever key switch mechanism supplied at an advance of 5 cents list per outlet; with pull sockets, at an advance of 48 cents per list outlet. Standard finish is brush brass.

List No.	Description	Std. Pkg.	Wt. Lbs.	Mfrs. List Price	W. E. List
822 <sup>4</sup> 922 922 <sup>1</sup> / <sub>2</sub>	3% inch bushing, not wired	10 10 10	5 5 5	\$1.00 1.25 1.25	\$1.80 2.25 2.25
ATTO-ICV	SOCKET EXTENSI	ONS		Sch	edule 3
914	Socket extension only, dipped brass	50	5	\$0.25	\$0.45
North L	TUNGSTEN ADAPT	ERS		Sch	edule 3
994	Tungsten Adapter	25	5	\$0.70	\$1.26
^Na	tional Electrical Code Standard.	Dig	itized by	00016	-

134-2

## ROTATING SOCKETS AND RECEPTACLES



List No. 9001



List No. 9002



List No. 9021

# Rotating Sockets

Rotating Sockets 9001-9024 are designed to effectively direct and to improve the distribution of light from any given installation. The shells wivels about the plug, and the shade rotates on the axis of socket, at right angles to supporting receptacle, giving the effect of a universal joint. The light flow can therefore be projected in any desired direction—applicable profited by the control of the control o be projected in any desired direction,—angularly, vertically, horizontally—through the use of half-shades. These sockets are particularly useful in office and factory lighting where it is desirable to concentrate the light on a limited area, and at the same time protect the eyes against glare. Standard finish is brush brass. For nickel or copper, add 16 cents list.

List No.	Description	Std. Pkg.	Wt. Lbs.	Mfrs. List	W. E. List
*9001	1 light, unbalanced	20	5	\$0.70	\$1.26
*9021	1 light, outside balance	20	15	.90	1:62
*9002	2 light		5	1.00	1.80
9013	3 light	20	6	1.30	2.34
9024	4 light	20	7	1.60	2.88



List No. 941



List No. 942



List No. 3326



# Plug Angle and Twin Sockets

660 Watts, 250 Volts

Plug Angle and Twin Sockets 941-9421/2 are useful in window lighting and similar places, where it is desired to change the position of lamps from horizontal to the vertical. Standard finish is brush brass.

List No.	Description	Std. Pkg.	Wt. Lbs.	Mfrs. List	W. E. List
*941	Angle socket, multiple	20	4	\$0.70	\$1.26
*942 *9421⁄6	Twin socket, multiple	20	5	1.00 1.00	1.80 1.80
T942 1/2	Twin socket, series	20	5	1.00	1.00

# Pendent Switch—Receptacles

Pendent Switch

Single Pole 6 Amperes, 125 Volts 3 Amperes, 250 Volts

The Pendent Switch 3326 is a simply constructed, reliable, single-pole device, operated by a single button rocker arm. It is provided with a double, i.e., a lower and an upper cord grip. Standard finish is brush brass. For any other finish except polished brass add 14 cents list.

*3326	Pendent switch	100	22	<b>\$</b> 0.50	\$0.90
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Type S Ring

For Crouse-Hinds Receptacles

Supporting Ring 4234 is designed for attaching to R-K and R-J series of Crouse-Hinds condulets, when equipped with R-K 527 receptacles. It has regular Benjamin Type S screw thread, and therefore accommodates the above class of receptacles to many Benjamin devices. Ring is of copper, natural finish.

4234	Supporting ring	 100	4	\$0.12	\$0.22

National Electrical Code Standard.

## Western Electric

### BENJAMIN SPECIALTIES





Bushing for 903A Counterbored for Heavy Cord



Bushing for 903C with Set Screw Insulated Tip











Bushing for 903F



Bushing for 903G



No. 919

# Attachment Plugs

Swivel Plug Discounts

903F may be used with heavy reinforced cord or flexible armored cable.
903G has an insulated bushing with metal sleeves especially adapted for flexible armored cable.
Separable Attachment Plug 919 will break upon the application of a small force at any angle. function is a safety factor. Accidental contact with the cord does not dislodge the appliance in use. several of these devices about an establishment, the value of interchangeable feature becomes apparent.

The body portion consists of black porcelain. The composition cap contains ample space for knotting

the cord.

List No.	Description	Std. Pkg.	Wt. Lbs.	Mfrs. List Price	W. E. List Price Each
903	Attachment Plug	100	9	\$0.25	\$0.45
903A*	Attachment Plug, with counter-bored bushing	100	+ 9	.25	.45
903C▲	Attachment Plug, with insulated set screw tip	100	10	.28	.50
903E▲	Attachment Plug, with 9 inch bushing	100	10	.25	.45
903F	Attachment Plug with 1/2 inch bushing	100	10	.50	.90
903G	Attachment Plug with $\frac{15}{32}$ inch bushing	100	10	.50	.90
904	Attachment Plug, with molded ring	100	10	.28	.50
at of the	7,			Sc	hedule 3
907	Non-swiveling Attachment Plug solid	100	9-	\$0.15	\$0.27
919	Non-swiveling Separable Plug	100	10	.25	.45



No. 903H

Flexi-handle Swivel Attachment Plug

Flexi-handle Swivel Plug 903H consists of a No. 903 attachment plug, to the swivel threaded portion of which is added a flexible metal extension 5 inches in length. The cord passes through the hollow stem, which turns freely upon it, and thus prevents twisting. The device adds 5 inches to the reach, and makes easier the attachment of portable appliances, particularly where open and lamp guards and deep, narrow styles of glassware are used. It renders unnecessary the removal of shades, and is especially serviceable with appliances that are moved from room to room, such as vacuum cleaners, etc. The flexible handle also protects the cord at a point exposed to much wear. Cord gripping cap accommodates reinforced cable up to 13 inch in diameter.

82					
List No.	Description	Std. Pkg.	Wt. Lbs.		W. E. List Price Each
	- TU 11 TU			en en	- 44
903H	Flexi-handle Plug	20	3	J <b>\$</b> 0₁.80	\$1.44

<sup>\*</sup>National Electrical Code Standard.

## BENJAMIN SOCKET CLUSTERS AND ADAPTERS



Adjustable Socket Cluster



Adjustable Plug Cluster



No. 878 Adjustable Socket Cluster

# Adjustable Plug Clusters

Schedule 3

Adjustable Socket Clusters 852-857 are for use with ceiling or pendent fixtures. Bushings tapped  $\frac{1}{3}$  inch or  $\frac{1}{4}$  inch may be ordered without change in price. Standard finish is brush brass.

v	E	<b>7</b> T	TC	:0
•	E.	L	E.C	,

List	No. of	Size of	Std.	Wt.	Mfrs. List	W. E.
No.	Lights	Bushing	Pkg.	Lbs.	Price	List Price
<b>≜</b> 852	2	3/8 in.	10	5	\$1.00	\$1.80
<b>≜</b> 853	3	3/8 in.	10	6	1.30	2.34
<b>≜</b> 854	4	3/8 in.	10	7	1.60	2.88
>		PULL	CHAIN			
<b>≜</b> 855 <b>≜</b> 856 <b>≜</b> 857	2 3 4	3/8 in. 3/8 in. 3/8 in.	10 10 10	6 7	\$1.60 2.20 2.80	\$2.88 3.96 5.04

Adjustable Plug Clusters 952-957 are used in connection with ceiling or pendent dome fixtures. turn in half-circle for adjustment of lamps with reference to shape of dome or reflector. Two and four-light clusters may be ordered wired two in series without change in price. Standard finish is brush brass.

#### **KEYLESS**

List No.	No: of Lights	Size of Bushing	Std. Pkg.	Wt. Lbs.	Mfrs. List Price	W. E. List Price
952	2	Wired	10	5	\$1.25	\$2.25
953	3	Wired	10	6	1.55	2.79
954	4	Wired	10	7	1.85	3.33
	•	PULL	CHAIN			
955	2	Wired	10	1 5	\$1.85	\$3.33
956	3	Wired	10	6	2.45	4.41
957	4	Wired	10	1 7	3.05	5.49

Adjustable Socket Clusters 867-879 are for use in connection with stand or table lamps. General description follows that for Nos. 952-957 above. Top bushing tapped up to 3% inch size for iron pipe or solid studs for shade support, furnished without change in price. Standard finish is brush brass.

#### WITH TOP AND BOTTOM BUSHING-KEYLESS

List No.	No. of Lights	Size of Bushing	Std. Pkg.	Wt.	Mfrs. List Price	W. E. List Price
<u>*867</u>	2	½ in.	10	5	\$1.20	\$2.16
▲868	3	1/4 in.	10	6	1.50	2.70
▲869	4	1/4 in.	10	7	1.80	3.24
		PULL	CHAIN			
▲877	2	1/4 in.	10	5	\$1.80	\$3.24
▲878	3	¼ in.	l 10	1 6	2.40	4.32

Adjustable Clusters with Key Lever Sockets instead of keyless, furnished at an advance in list of 5 cents per outlet.

136

1/4 in.



Wiring Devices

#### Reducers

10

Schedule 3

This reducer is designed for adapting Mogul screw base sockets for the use of medium screw base lamps. When attached, the center contact is lowered one-half inch, thus bringing the filament of the small base lamp to its proper position. Both threaded shells are made of copper.

List	Description	Std.	Wt.	Mfrs. List	W. E.
No.		Pkg.	Lbs.	Price	List Price
98	Reducer	50	31/2	\$025	\$0.45

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National Electrical Code Standard.

## Western Electric

### **CUTLER-HAMMER SWITCHES**







No. 7010 Porcelain

#### Porcelain Pendent Switches 6 Amperes, 125 Volts; 3 Amperes, 250 Volts

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each		
7000▲	Single pole, porcelain	10	100	30	\$0.5L	<b>\$1.20</b>		
10 Amperes, 125 Volts; 5 Amperes, 250 Volts								
7010▲	Single pole, porcelain	10	100	45	\$0.70	\$1.68		

Note: On the above standard package may be made up of unbroken cartons of assorted colors. Standard finish: Gray. White or brown will be furnished when specified.



No. 7001 Porcelain, Brass Cap



No. 7006 Porcelain, Brass Cap



No. 7007 Brass Shell

# Porcelain Pendent Switches With Brass Cap 6 Amperes, 125 Volts; 3 Amperes, 250 Volts

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
7001	Single pole, brass cap threaded 1/8 inch pipe	10	100			\$1.32
7002▲	Single pole, brass cap threaded 3/8 inch pipe	10	100	∠38	.60	1.44
*7003 <b>^</b>	Single pole, for pendent use only	10	100	38	. 55	1.32

Note: Standard package discount allowed on assortment (in unbroken cartons) of 100 List Nos. 7001, 7002 and 7003.

Standard finish: Gray. White or brown will be furnished when specified.

#### 6 Amperes, 125 Volts; 3 Amperes, 250 Volts

7004	Single pole, three-point, brass cap threaded 1/8 inch pipe	10	50	20	\$0.70 \$1.68
	Single pole, three-point, brass cap threaded 3/8 inch pipe	10	50	20	.75 1.80
<b>*7006</b> ▲	Single pole, three-point, for pendent use only	10	50	20	.70  1.68

Note: Standard package discount allowed on assortment (in unbroken cartons) of 50 List Nos. 7004, 7005 and 7006.

Standard finish: Gray. White or brown will be furnished when specified.

# Brass Shell Pendent Switch

6 Amperes, 125 Volts; 3 Amperes, 250 Volts

7007 Brass shell, acorn type	10	100	15	<b>\$</b> 0.50 <b>\$</b> 1. <b>20</b>

Standard finish: Polished brass. Brush brass finish no additional charge.

For switches in any other finish add \$0.24 to list price, Mfrs. List, \$0.10. Standard package discount allowed on accordingly to finishes in full centers of 10 arch.

count allowed on assortment of finishes in full cartons of 10 each.

\* Cap of List No. 7003 and 7006 has composition bushing with 11 inch hole for reinforced cord.

<sup>▲</sup> National Electrical Code Standard.

## Western Electric

## **CUTLER-HAMMER SWITCHES**







No. 7021 Brass Shell

Two-circuit Pendent Switches 6 Amperes, 125 Volts; 3 Amperes, 250 Volts

List No.	Description	Carton Quantity		Wt.	Mfrs. List Each	List
7020	Single pole, porcelain, with porcelain bushing	10	50	34	\$1.00	\$2.40
Nome Condand Smith Con White as business will be Compiled as the condition of the control of the condand of the condition of						

Note: Standard finish: Gray. White or brown will be furnished when specified. Standard package may be made up of unbroken cartons of assorted colors.

6 Amperes, 125 Volts; 3 Amperes, 250 Volts

Note: Standard finish: Polished brass. Brush brass no additional charge.

For other finishes add \$0.17 to list price.

Standard package discount allowed on assortment of finishes in full cartons of 10 each.



No. 7044 Three Heat Cord Switch



No. 7040 Cord Switch



No. 7150 Candelabra Switch

# Feed. Through or Cord Switch 6 Amperes, 125 Volts; 3 Amperes, 250 Volts

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
7044	Three heat, single pole, brass shall, polished nickel	10	50	20	\$1.00	
<b>7040</b> ▲	Single pole, brass shell, polished nickel	10	100	15	.60	1.44
7041	Single pole brass shell, polished nickel	10	100	15	.60	1.44

Note: Cord switches are designed for use with flat irons, soldering irons, table stoves, toasters, vacuum cleaners, etc.

The No. 7041 switch is the same as No. 7040 in all respects except that knock-out bushings are supplied, thus providing a small opening for cords of small diameter and which can be adapted for larger reinforced cords simply by knocking out or cutting out with a penknife the inner collar of the bushings.

# Push-button Candelabra Switch

½ Ampere, 125 Volts

<b>7150</b> ▲	Porcelain body, brass stem for 4 inch candle	20	100	20	\$0.90 \$2.16

Standard push bars are 1% inches long. Bars 1% inches or 2 inches long substituted without extra charge if specified.

Extra stems, \$0.14 each, Mfrs. List, \$0.06, std. pkg., 50. Extra push-bars, \$0.24 each, Mfrs. List, \$0.10. Stems for 3 inch or 5 inch candle will be substituted without extra charge if specified. Price includes stem spider piece for supporting the switch, and fibre washer for holding the candle concentric with the stem and socket.

A National Electrical Code Standard.

## CUTLER-HAMMER CANOPY AND DOOR SWITCHES







No. 7152



No. 7155



# Push and Pull Canopy Switches

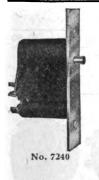
3 Amperes 125 Volts; 1 Ampere 250 Volts

List No.	Stem and Bushing		Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
7151 <sup>4</sup> 7152 <sup>4</sup>	$\frac{1}{16}$ ins.	For sheet metal Canopy For cast metal Canopy	20 20	100 100	15 15	\$0.75 .80	\$1.80 1.92
7152 <sup>4</sup> 7154 <sup>4</sup> 7155 <sup>4</sup>	ins.	With knob threaded ½ x 27 to receive stan-	20	100	15	.84	2.02
	20	dard bottom fixture knob	20	100	15	.80	1.92

Standard finish: Polished brass. Brush brass or polished nickel finish no additional charge. Standard package discounts allowed on assortments (in unbroken cartons) of 100, List Nos. 7151, 7152 and 7155.

#### YOKE FOR CANOPY SWITCH NO. 7155

7156	Copper plated steel yoke	50	50	1	\$0.05	\$0.12









No. 7211

#### Door Switches With Plate AND APPROVED BOX FOR ARMORED CABLE

List No.	Description	Carton Quantity	Std. Pkg.	l'kg. Wt. Lbs.		W. E. List Each
7240* <b>^</b> 7241* <b>^</b>	Circuit closed when door is open	5 5	25 25	20 20	\$2,25 2.25	\$5.40 5.40

Note: The box is 1 1/12 inches wide x 2 3/4 inches long. The plate is 45/8 x 1 1/4 inches and will fit no other box.

#### Door Switches Without Box BUT WITH UNIVERSAL PLATE

7245* Circuit closed when box is open		25 25	20 20	\$2.00	\$4.60 4.60
---------------------------------------	--	----------	----------	--------	----------------

Note: The Universal plate is 53/8 x 13/8 inches. Standard package discounts allowed on assortment (in unbroken cartons) of 25, List Nos. 7240, 7241, 7245 and 7246.

## Flush Switches

	Single pole, 10 amp. 125 volts; 5 amp. 250 volts	 100	62	\$0.72	\$1.73
7202	Double pole, 10 amp. 125 and 250 volts	 50	35	1.00	2.40
7203	Three point, 10 amp. 125 volts; 5 amp. 250 volts	 50	35	1.00	2.40

100 Push Button Switches assorted also constitute a standard package.

#### Struckup Brass Plates For Flush Switches

For one switch..... 100 holes \$0.53 7212 For two switches. 100 holes 1.05

\*6 Amperes 125 Volts; 3 Amperes 250 Volts. Note: 100 single plates or the equivalent in gangs in assorted finishes is a standard package of push button flush plates. Polished brass, brush brass, polished bronze, oxidized copper and polished nickel are all standard finishes, no extra charge. Solid brass plates in gangs or tandem can be furnished.

Prices on application. National Electrical Code Standard.

# Western Electric

# **CUTLER-HAMMER PLUGS AND RECEPTACLES**











No. 7605 Attachment Plug

	With	Separable	Cap,	660	Watts	250	Volts
--	------	-----------	------	-----	-------	-----	-------

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfr. List Each	W. E. List Each
7600	White porcelain base and cap plug	10	250	80	\$0.25	\$0.45
7601			250	80	.25	.45
7602	Black composition base and cap plug	10	250	80	.35	. 63
NT.	7000 17001 1 1 1 1				100000000000000000000000000000000000000	

Nos. 7600 and 7601 may be assorted to make up standard package.

## Split Attachment Plug

660 Watts 250 Volts

7605▲	Black Thermoplex, heat resisting composition	25	100	10	\$0.20	\$0.36

#### Cord Connector 10 Amperes 250 Volts

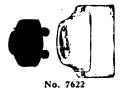
7650 <sup>▲</sup>   Black composition co	d connector	 100   23	\$0.50	\$0.90

#### Motor Attachment Plug Separable Type

7655*   Attachment plug 10 amperes 250 volts	10	100	93	80 50	\$0.00
Attachment plug To amperes 250 voits	10	100	20	₩0.00	φυ. <b>3</b> υ









Flush Receptacles

For Attachment Plug Caps, 10 Amperes 250 Volts

	List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
•	7611	With brass plate for attaching plug with porcelain cap		50	40	\$1.00	\$2.40
	<b>7612</b> ▲	With brass plate for attaching plug with composition cap.	10	50	40	1.00	2.40
	7613	With brass plate without cap	10	50	40	. 85	2.04

Round Base Surface Receptacle

	For Attachment Plug Caps, 10 Ampere					
7616	For concealed work, with porcelain cap	10	50	23	\$0.35	\$0.84
7617	For concealed work, with composition cap	10	50	23	.35	.84
76184	For concealed work, without cap	10	50	23	.20	.48
-			1 00	20	1,201	-

	Rectange	ular	Base	e .	Recepta	acle	9
For	Attachment	Plug	Caps,	10	Amperes	250	Volts

7621	For molding work, with porcelain cap	10	50	25	\$0.35	\$0.84
7622	For molding work, with composition cap	10	50	25	.35	.84
7623▲	For molding work, without cap	10	50	25	.20	.48

# Round Slotted Base Surface Receptacle

7627	Kound slotted base receptacle	10	50	28	\$0.35	\$0.84
7628	Round slotted base receptacle	10	50	28	.35	.84
7629	Round slotted base receptacle	10	50	28	.20	.48

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No. 2148

No. 20

No. 220

No. 2684

No. 21

# SINGLE POLE, SMALL SIZE

5 Amperes, 125 Volts; 3 Amperes, 250 Volts

Schedule "S"

List No.		•	Diameter of Base	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List	W. E. List Each
2148 <sup>4</sup>	Solid Base	Plain Plain Indicating Indicating	2 ins.	1 13 ins.	10	250	71	\$0.28	\$0.50
2161 <sup>4</sup>	Slotted Base		2 ins.	1 13 ins.	10	250	71	.28	.50
2162 <sup>4</sup>	Solid Base		2 ins.	1 13 ins.	10	250	73	.32	.58
2163 <sup>4</sup>	Slotted Base		2 ins.	1 13 ins.	10	250	73	.32	.58

#### SINGLE POLE

#### 5 Amperes, 125 Volts; 3 Amperes, 250 Volts

20^	Solid Base	Plain	$2\frac{1}{8}$ ins.	1 7 ins.	10	100	30	\$0.36	\$0.65
1204	Slotted Base	Plain	$2\frac{1}{8}$ ins.	1 7 ins.	10	100	30	.36	.65
2204	Solid Base	Indicating	$2\frac{1}{8}$ ins.	1 7 ins.	10	100	30	.40	.72
320▲	Slotted Base	Indicating	$2\frac{1}{8}$ ins.	1 1 ins.	10	100	30	.40	72

#### SINGLE POLE

#### 5 Amperes, 125 Volts; 3 Amperes, 250 Volts

2684**	Solid Base	Plain	2	ins.   1 1 ins.	10	100	28	\$0.36	\$0.65
2654**	Solid Base	Indicating	2	ins.   1 🙀 ins.	10	100	28	40	. 72

<sup>\*</sup>The above switches have a metal covered base.

#### SINGLE POLE

#### 10 Amperes, 125 Volts; 5 Amperes, 250 Volts

21	Solid Base	Plain	2 14 ins.	13/4 ins.	10	1 100	53	180.481	\$0.86
1214	Slotted Base	Plain	$2\frac{15}{32}$ ins.	$1\frac{3}{4}$ ins.	10	100	53	.48	.86
2214	Solid Base	Indicating	$2\frac{15}{32}$ ins.	$1\frac{3}{4}$ ins.	10	100	53	.54	.97
321▲	Slotted Base	Indicating	$2\frac{15}{32}$ ins.	$1\frac{3}{4}$ ins.	10	100	53	. 54	. 97

#### SINGLE POLE

#### 10 Amperes, 250 Volts

2983	Solid Base	Plain	215 ins.	134 ins.	10	100	54	\$0.66	\$1.19
2984	Slotted Base	Plain	2 15 ins.	134 ins.	10	100	54	.66	1.19
2985	Solid Base	Indicating	2 15 ins.		10	100	54	.76	1.37
<b>^2986</b> ▲	Slotted Base	Indicating	$2\frac{15}{3}$ ins.	13/4 ins.	10	100	54	.76	1.37

#### SINGLE POLE

#### 20 Amperes, 125 Volts

31	Solid Base	Plain	3 16 ins.   2		1	10	15	\$0.90	\$1.62
131	Slotted Base	Plain	$3\frac{1}{16}$ ins.   2	$2\frac{5}{32}$ ins.	1	10	15	.90	1.62
231	Solid Base	Indicating	$3\frac{1}{16}$ ins. 2		1	10	15	1.00	1.80
331	Slotted Base	Indicating	$ 3\frac{1}{16}$ ins. $ 2$	2 <del>5</del> ins.	1	10	15	1.00	1.80

#### SINGLE POLE

#### 30 Amperes, 125 Volts

40	Solid Base	Plain	3½ ins.		1	10	17	\$1.40	
140	Slotted Base	Plain		$2\frac{7}{16}$ ins.	1	10	17		2.52
240	Solid Base	Indicating		$2\frac{7}{16}$ ins.	1	10	17	1.50	2.70
340	Slotted Base	Indicating	$3\frac{1}{2}$ ins.	$2\frac{7}{16}$ ins.	1	10	17	1.50	2.70



The above switches may be converted into lock switches by the use of the Lock Attachments

When specified, round handles will be furnished on the above switches in 3, 5 and 10 ampere sizes without extra charge.

^National Electrical Code Standard. Digitized by GOOS C Wiring Devices









No. 432

No. 2152

No. 43

# DOUBLE POLE 5 Amperes, 250 Volts

Sch	edu	le	"S"

		5 Amp	eres, 250	Volts	•		S	chedul					
List No.			Diameter of Base	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List	W. E. List Each				
2085*	Solid Base	Plain	21/8 ins.	1 7 ins.	10	100	35	<b>≽</b> U.56	\$1.01				
2086	Slotted Base	Plain	$2\frac{1}{8}$ ins.	$1\frac{7}{16}$ ins.	10	100	35	.56	1.01				
2087	Solid Base	Indicating	$2\frac{1}{8}$ ins.	$1\frac{7}{16}$ ins.	10	100	35	.64	1.15				
2088	Slotted Base	Indicating	$12\frac{1}{8}$ ins.	$1_{\frac{7}{16}}$ ins.	10	100	35	.64	1.15				
DOUBLE POLE 10 Amperes, 250 Volts													
22*	Solid Base	Plain	$ 2\frac{15}{32}$ ins.	1 3/4 ins.	10	100	54	\$0.66	\$1.19				
122 <sup>4</sup>   Slotted Base   Plain   2 \frac{15}{2} \text{ ins.}   12 \frac{1}{2} \text{ ins.}   10   100   54   66   1.19   222 <sup>4</sup>   Solid Base   Indicating   2 \frac{15}{2} \text{ ins.}   12 \frac{1}{2} \text{ ins.}   10   100   54   .76   1.37   1.37													
322▲	Slotted Base	Indicating	2 <del>11</del> ins.	$1\frac{3}{4}$ ins.	10	100	54	.76	1.37				
DOUBLE POLE 20 Amperes, 250 Volts													
32▲	Solid Base	Plain	$3\frac{1}{16}$ ins.	$2\frac{5}{12}$ ins.	1	30	30	\$1.40	\$2.52				
132▲	Slotted Base	Plain	$3\frac{1}{16}$ ins.	$2\frac{5}{12}$ ins.	1	30	30	1.40	2.52				
432	Solid Pase	Indicating	$3\frac{1}{16}$ ins.	2 📆 ins.	1 '	30	30	1.50	2.70				
532▲	Slotted Base	Indicating	$3\frac{1}{16}$ ins.	$2\frac{3}{32}$ ins.	1	30	30	1.50	.2.70				
DOUBLE POLE 30 Amperes, 250 Volts													
42▲	Solid Base	Plain	$3\frac{1}{2}$ ins.	$2\frac{7}{16}$ ins.	1	30	44	\$1.70	\$3.06				
1424	Slotted Base	Plain	$3\frac{1}{2}$ ins.	$2\frac{7}{16}$ ins.	1	30	44	1.70	3.06				
442	Solid Base	Indicating	$3\frac{1}{2}$ ins.	$2\frac{7}{16}$ ins.	1	30	44	1.80	3.24				
<u>542</u> ▲	Slotted Base	Indicating	$  3\frac{1}{2} $ ins.	$ 2\frac{7}{16}$ ins.	1	30	44	1.80	3.24				
		nperes, 125 V		npere, 25									
2152	Solid Base	Plain	$2\frac{1}{8}$ ins.	$1\frac{7}{16}$ ins.	10	100	34	<b>\$</b> 0.48					
21534	Slotted Base	Plain	$  2\frac{1}{8} $ ins.	$1\frac{7}{16}$ ins.	10	100	34	.48	. 86				
		peres, 125 Vo	<del></del>	nperes, 25									
2089	Solid Base	Plain	$\frac{21}{8}$ ins.	$1\frac{7}{16}$ ins.	10	100	35	\$0.56					
2090*	Slotted Base	Plain	$12\frac{1}{8}$ ins.	$1\frac{7}{16}$ ins.	10	100	3.5	. 56	1.01				
	10 An	nperes, 125 V	IREE-WA'	Y nperes, 2	50 Volts								
23*	Solid Base	Plain	2 1/2 ins.	13/4 ins.	10	50	27	\$0.76					
123▲	Slotted Base	Plain	235 ins.	13/4 ins.	10	50	27	. 76	1.37				
		20 Amp	REE-WA' peres, 125										
33	Solid Base	Plain	$3\frac{1}{16}$ ins.	$2\frac{5}{32}$ ins.	1	10	17	\$1.50					
133	Slotted Base	Plain	$3\frac{1}{16}$ ins.	$ 2\frac{5}{32}$ ins.	1	10	17	1.50	2.70				
		30 Amp	IREE-WA' beres, 125	Volts									
43	Solid Base	Plain	$3\frac{1}{2}$ ins.	$ 2\frac{1}{16}$ ins.	1	10	19	\$1.80					
143	Slotted Base	Plain	$3\frac{1}{2}$ ins.	$2\frac{7}{16}$ ins.	1	10	19	1.80	3.24				

The above switches may be converted into lock switches by the use of the Lock Attachments

shown on following page.
When specified, round handles will be furnished on the above switches in 3, 5 and 10 ampere size, without extra charge.

A National Electrical Code Standard.

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# "H & H" ROTARY SWITCHES AND ATTACHMENTS









No. 24

No. 226

No. 2545

No. 3030

# Rotary Surface Switches

	5 Amperes, 125 Volts; 2 Amperes, 250 Volts Schedule "S"											
List No.			Diameter of Base	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List	W. E. List Each			
24 <sup>*</sup> 124 <sup>*</sup>	Solid Base Slotted Base	Plain Plain	$2\frac{15}{32}$ ins. $2\frac{15}{32}$ ins.	134 ins. 134 ins.	10 10	30 30	17 17	\$0.86 .86	\$1.55 1.55			
FOUR-WAY												
10 Amperes, 125 Volts; 5 Amperes, 250 Volts												
2959	Solid Base	Plain Plain	211 ins.	$2\frac{1}{16}$ ins.	1	10	12 12	\$1.90	\$3.42			
	TRIPLE POLE											
		10	Amperes, 2									
26^	Solid Base	Plain	211 ins.	$2\frac{1}{16}$ ins.	1	10	11	\$1.90	\$3.42			
126	Slotted Base	Plain	2 <del>11</del> ins.	$2\frac{1}{16}$ ins.	1	10	11	1.90	3.42			
226	Solid Base	Indicating	$2\frac{1}{16}$ ins.	$2\frac{1}{16}$ ins.	1	10	11	2.00	3.60			
<b>326</b>	Slotted Base	Indicating	2 <del>11</del> ins.	$2\frac{1}{16}$ ins.	1	10	11	2.00	3.60			
			TRIPLE I	POLE								
		30	Amperes,	250 Volts		,	•					
2655	Solid Base	Plain	41/4 ins.	$3\frac{3}{16}$ ins.	1	10	10	\$2.90	\$5.22			
<b>2656</b>	Slotted Base	Plain	$4\frac{1}{4}$ ins.	$3\frac{3}{16}$ ins.	1	10	10	2.90	5.22			
<b>2657</b>	Solid Base	Indicating	$4\frac{1}{4}$ ins.	$3\frac{3}{16}$ ins.	1	10	10	3.00	5.40			
2658	Slotted Base	Indicating	41/4 ins.	$3\frac{3}{16}$ ins.	1	10	10	3.00	5.40			

# Taplet and Wood Molding Switches

		5 amperes, 1	25 Volts; 3		250 Volt	8					
2541 <sup>4</sup> 2542 <sup>4</sup>		Plain Indicating	1 :::::	$2\frac{9}{32}$ ins. $2\frac{9}{32}$ ins.	10 10	100	41 41	\$0.36	\$0.65 .72		
	DOUBLE POLE 5 Ámperes, 250 Volts										
2543 <sup>▲</sup> 2544 <sup>▲</sup>		Plain   Indicating		$2\frac{9}{32}$ ins. $2\frac{9}{32}$ ins.	10 10	100	43 43	\$0.66 .76			
			WILDER S	TIARE							

... | Plain | ..... |  $2\frac{1}{32}$  ins. | 10 | 100 | 43 | \$0.66 | \$1.19 | these for Mounting on  $\frac{1}{2}$  | Inch Condulets

# Switches for Mounting on ½ Inch Condulets SINGLE POLE 5 Amperes, 125 Volts; 3 Amperes, 250 Volts

5 Amperes, 125 Volts; 3 Amperes, 250 Volts

	 poroc,	 					
3003 <b>▲</b> 3030 <b>▲</b>	 Plain Indicating	 1 33 ins. 1 33 ins.	10 10	100 100	42 42	\$0.36 .40	\$0.65 .72

The above switches may be converted into lock switches by the use of the Lock Attachments shown below.

When specified, round handles will be furnished on the above switches in 3, 5 and 10 ampere size without extra charge.

Lock Attachments for Rotary Switches

	Mfr. No.		Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List	W. E. List Each
7	5001 <sup>▲</sup>	Lock Attachment only, for 5 and 10 ampere 250 volt switch and for 3 and 5 ampere 600 volt switch  Lock Attachment only, for 20 ampere 250 volt switch and	100	3	<b>\$</b> C.16	\$0.29
	5010− 5009 <b>^</b>	for 15 and 20 ampere 600 volk switch	100	3	.16	. 29
No. 5001	5002▲	for 10 ampere 600 volt switchLock Key only, to fit all the above Lock Attachments	100 100	<b>3</b> 3	. 16 . 0⊀	.29 .11

<sup>\*</sup>National Electrical Code Standard.

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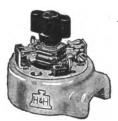
For Use With Metal Molding







No. 2397



No. 2298



No. 2359

# SINGLE POLE 5 Amperes, 125 Volts; 3 Amperes, 250 Volts

Schedule "S"

List No.			Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
2291 <sup>4</sup> 2391 <sup>4</sup> 2292 <sup>4</sup> 2392 <sup>4</sup>	Single end	Plain Indicating Plain Indicating	1 13 ins. 1 13 ins. 1 13 ins. 1 13 ins. 1 13 ins.	10 10 10 10	100 100 100 100	40 40 43 43	\$0.36 .40 .36 .40	.72 .65

#### DOUBLE POLE 5 Amperes, 250 Volts

2296 <sup>4</sup> 2396 <sup>4</sup> 2297 <sup>4</sup> 2397 <sup>4</sup>	Single end Single end Double end Double end	Indicating Plain	1	10 10 10 10	100 100 100 100	43 43 45 45	\$0.66 .76 .66 .76	
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#### THREE-WAY

#### 5 Amperes, 125 Volts; 3 Amperes, 250 Volts

<b>22</b> 98▲ 2299▲	Single end Double end		1 1/6 ins. 1 1/6 ins.	10 10	100 100	43 45	<b>\$</b> 0.66 .66	
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#### SINGLE POLE

### 10 Amperes, 125 Volts; 5 Amperes, 250 Volts

2351 <sup>4</sup> 2352 <sup>4</sup> 2353 <sup>4</sup> 2354 <sup>4</sup>	Single end Single end Double end Double end	Indicating Plain	134 ins. 134 ins. 134 ins. 134 ins.	10 10 10 10	100 100 100 100	40 40 40 40	\$0.58 .64 .58 .64	1.15
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# DOUBLE POLE 10 Amperes, 250 Volts

2355 <sup>*</sup> 2356 <sup>*</sup> 2357 <sup>*</sup> 2358 <sup>*</sup>	Single end	Indicating Plain	134 ins. 134 ins. 134 ins. 134 ins.	10 10 10 10	100 100 100 100	42 42 42 42	\$0.76 .86 .76 .86	1.55 1.37
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#### THREE-WAY

#### 10 Amperes, 125 Volts; 5 Amperes, 250 Volts

2359 <sup>4</sup> 2360 <sup>4</sup>	Single end		1¾ ins. 1¾ ins.	10 10	100 100	42 42	\$0.76 .76	\$1.37 1.37
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The above switches may be converted into lock switches by the use of the Lock Attachment When specified, round handles will be furnished on the above switches in 5 and 10 states without extra charge.

▲ National Electrical Code Standard.

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No. 2503



No. 2615



No. 2728

# Electrolier Type

#### THREE SECTIONS. CONNECTIONS 1, 1 & 2, 1 & 2 & 3, OFF

These switches operate as follows: First turn connects section One. Second turn connects sections One and Two. Third turn connects sections One, Two and Three. Fourth turn, Off.

### \*10 Amperes, 125 Volts; 5 Amperes, 250 Volts

Schedule "S"

List No.	•		Diameter of Base	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
25 <sup>4</sup> 125 <sup>4</sup> 225 <sup>4</sup> 325 <sup>4</sup>	Solid Base Slotted Base Solid Base	Plain Plain Indicating Indicating	2 15 ins. 2 15 ins. 2 15 ins. 2 15 ins. 2 15 ins.	134 ins. 134 ins. 134 ins. 134 ins.	10 10 10 10	30 30 30 30	17 17 17 17	\$0.90 .90 1.00 1.00	1.62 1.80

#### 15 Amperes, 125 Volts; 10 Amperes, 250 Volts

2501 <sup>4</sup> 2502 <sup>4</sup> 2503 <sup>4</sup>	Solid Base Slotted Base	Plain Plain Indicating	$3\frac{1}{16}$ ins.	$2\frac{5}{37}$ ins. $2\frac{5}{37}$ ins. $2\frac{5}{37}$ ins.	1 1	30 30 30	30 30 31	\$1.40 1.40 1.50	\$2.52 2.52
2504 <sup>▲</sup>	Slotted Base	Indicating	$3\frac{1}{16}$ ins. $3\frac{1}{16}$ ins.	$2\frac{5}{32}$ ins. $2\frac{5}{32}$ ins.	1	<b>3</b> 0	31	1.50	2.70 2.70

#### THREE SECTIONS. CONNECTIONS 1, 2, 3, OFF

These switches operate as follows: First turn connects section One. Second turn connects section Two. Third turn connects section Three. Fourth turn, Off.

#### \*10 Amperes, 125 Volts; 5 Amperes, 250 Volts

2615	Solid Base	Plain	2 1/2 ins.	13/4 ins.	10	30	17	\$0.90	\$1.62
2616	Slotted Base	Plain	2 14 ins.	13/4 ins.	10	30	17	.90	1.62
2617	Solid Base	Indicating	2 15 ins.	13/4 ins.	10	30	17	1.00	1.80
<b>2</b> 618	Slotted Base	Indicating	2 14 ins.	134 ins.	10	30	17	1.00	1.80

#### 15 Amperes, 125 Volts; 10 Amperes, 250 Volts

2725	Solid Base	Plain	$3\frac{1}{16}$ ins.	$2\frac{5}{12}$ ins.	1	30	29	\$1.40	\$2.52
2726	Slotted Base	Plain	$3\frac{1}{16}$ ins.	$2\frac{5}{12}$ ins.	1 -	30	29	1.40	2.52
2727	Solid Base	Indicating	$3\frac{1}{16}$ ins.	$2\frac{3}{12}$ ins.	1	30	29	1.50	2.70
2728	Slotted Base	Indicating	$3\frac{1}{18}$ ins.	$2\frac{5}{32}$ ins.	1	30	29	1.50	2.70

148

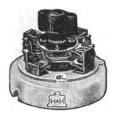


The above switches may be converted into lock switches by the use of the Lock Attachments.

\* When specified, round handles will be furnished on the above switches without extra charge.

A National Electrical Code Standard.

Digitized by GOORE Wiring Devices



No. 2664





No. 629

# Electrolier Type

### TWO SECTIONS. CONNECTIONS 1, 2, 1 & 2, OFF

These switches operate as follows: First turn connects section One. Second turn connects section Two. Third turn connects sections One and Two. Fourth turn, Off.

### \*10 Amperes, 125 Volts; 5 Amperes, 250 Volts

Schedule "S"

List No.			Diameter of Base	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
2661 <sup>4</sup> 2662 <sup>4</sup> 2663 <sup>4</sup> 2664 <sup>4</sup>	Solid Base	Plain	2 15 ins. 2 15 ins. 2 15 ins. 2 15 ins. 2 15 ins.	1 3/4 ins. 1 3/4 ins. 1 3/4 ins. 1 3/4 ins.	10 10 10 10	30 30 30 30	17 17 17 17	\$0.76 .76 .86 .86	1.55

#### 15 Amperes, 125 Volts; 10 Amperes, 250 Volts

2669 <sup>4</sup> 2670 <sup>4</sup> 2671 <sup>4</sup>	Solid Base Slotted Base	Plain Plain Indicating	$\begin{vmatrix} 3\frac{1}{16} & \text{ins.} & 2\frac{1}{3} \\ 3\frac{1}{16} & \text{ins.} & 2\frac{1}{3} \\ 3\frac{1}{16} & \text{ins.} & 2\frac{1}{3} \end{vmatrix}$	ins. 1	30 30 30	30 30 30	\$1.40   \$2.52   1.40   2.52   1.50   2.70
2672	Slotted Base	Indicating	$3\frac{16}{16}$ ins. $2\frac{1}{3}$		30	30	1.50 2.70

#### TWO SECTIONS. CONNECTIONS 1, 1 & 2, 2, OFF

These switches operate as follows: First turn connects section One. Second turn connects sections One and Two. Third turn connects section Two. Fourth turn, Off.

#### \*10 Amperes, 125 Volts; 5 Amperes, 250 Volts

429▲	Solid Base	Plain	215 ins.	13/4 ins.	10	1 30	1 17	1\$0.90 \$1	1 . 62
529▲	Slotted Base	Plain	$2\frac{11}{32}$ ins.	134 ins.	10	30	17	.90	1 . 62
629▲	Solid Base	Indicating	2 15 ins.	134 ins.	10	30	17	1.00 1	1.80
<b>729</b> ▲	Slotted Base	Indicating	2 15 ins.	134 ins.	10	30	17	1.00	1 . 80

#### 15 Amperes, 125 Volts; 10 Amperes, 250 Volts

2598▲	Solid Base	Plain	$ 3\frac{1}{16}$ ins.	$2\frac{5}{12}$ ins.	1	30	30	\$1.40 \$2.52
2599▲	Slotted Base		$3\frac{1}{16}$ ins.	$2\frac{5}{32}$ ins.	1	30	30	1.40 2.52
2600▲	Solid Base	Indicating	$3\frac{1}{16}$ ins.	$2\frac{5}{32}$ ins.	1	30	30	1.50 2.70
2591	Slotted Base	Indicating	$3\frac{1}{16}$ ins.	2 1/2 ins.	1	30	30	1.50 2.70



The above switches may be converted into lock switches by the use of the Lock Attachments.

When specified, round handles will be furnished on these switches without extra charge.

149 Wiring Devices







No. 2507



No. 2721

## Electrolier Type

#### TWO SECTIONS. CONNECTIONS 1, 1 & 2, 1, OFF

These switches operate as follows: First turn connects section One. Second turn connects sections One and Two. Third turn connects section One. Fourth turn, Off.

### \*10 Amperes, 125 Volts; 5 Amperes, 250 Volts

Schedule "S"

List No.			Diameter of Base	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
29 <sup>4</sup> 129 <sup>4</sup> 229 <sup>4</sup> 329 <sup>4</sup>	Solid BaseSlotted BaseSolid BaseSlotted Base	Plain Plain Indicating Indicating	2½ ins. 2½ ins. 2½ ins. 2½ ins. 2½ ins.	1 3/4 ins. 1 3/4 ins. 1 3/4 ins. 1 3/4 ins.	10 10 10 10	30 30 30 30	17 17 17 17	\$0.90 .90 1.00 1.00	1.80

### 15 Amperes, 125 Volts; 10 Amperes, 250 Volts

$2508^{\bullet}$   Slotted Base   Indicating   $3 \leftrightarrow 108$ ,   $2 \leftrightarrow 108$ ,   1   30   30   1.50  2.	2505 <sup>4</sup> 2506 <sup>4</sup> 2507 <sup>4</sup> 2508 <sup>4</sup>	Solid BaseSlotted BaseSolid BaseSlotted BaseSlotted Base	Plain Plain Indicating Indicating	3 \( \frac{1}{6} \) ins. 2 \( \frac{3}{3} \) ins. 3 \( \frac{1}{6} \) ins. 2 \( \frac{5}{2} \) ins. 3 \( \frac{1}{6} \) ins. 2 \( \frac{5}{2} \) ins. 3 \( \frac{1}{6} \) ins. 2 \( \frac{5}{2} \) ins.	1 1 1 1	30 30 30 30	30 30 30 30 30	1.50	\$2.52 2.52 2.70 2.70
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#### TWO SECTIONS. CONNECTIONS 1, -OFF, 2, -OFF

These switches operate as follows: First turn connects section One. Second turn, Off. Third turn connects section Two. Fourth turn, Off.

#### \*10 Amperes, 125 Volts; 5 Amperes, 250 Volts

2721 <sup>4</sup> 2722 <sup>4</sup> 2723 <sup>4</sup> 2724 <sup>4</sup>	Solid Base	Plain Plain Plain Indicating Indicating	2 15 ins. 1 34 ins. 2 15 ins. 1 34 ins. 2 15 ins. 1 34 ins. 2 15 ins. 1 34 ins. 2 15 ins. 1 34 ins.	10 10	30   17 30   17 30   17 30   17	\$0.90 .90 1.00 1.00	1.62 1.80
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#### 15 Amperes, 125 Volts; 10 Amperes, 250 Volts

2594 <sup>4</sup> 2595 <sup>4</sup> 2596 <sup>4</sup> 2597 <sup>4</sup>	Solid Base	Plain Plain Indicating Indicating	$3\frac{1}{16}$ ins.	$2\frac{5}{32}$ ins. $2\frac{5}{32}$ ins. $2\frac{5}{32}$ ins. $2\frac{5}{32}$ ins. $2\frac{5}{32}$ ins.	1 1 1 1	30 30 30 30	30 30 30 30	\$1.40 1.40 1.50 1.50	2.52 2.70
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The above switches may be converted into lock switches by the use of the Lock Attachments.

Digitized by GOOSIC Wiring Devices

<sup>\*</sup>When specified, round handles will be furnished on the above switches without extra charge.

<sup>\*</sup>National Electrical Code Standard.









No. 2611

Electrolier Type

## TWO SECTIONS. CONNECTIONS 1, 2, OFF

These switches operate as follows: First turn connects section One. Second turn connects section Two. Third turn, Off.

\*10 Amperes, 125 Volts; 5 Amperes, 250 Volts

Schedule "S"

List No.			Diameter of Base	ScrewHoles Spaced on a Circle	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
2611	Solid Base	Plain	$2\frac{15}{32}$ ins.	13/4 ins.	10	30	17	\$0.90	\$1.62
2612	Slotted Base	Plain .	$2\frac{15}{12}$ ins.	13/4 ins.	10	30	17	.90	1.62
2613	Solid Base	Indicating	2 15 ins.	134 ins.	10	30	17	1.00	1.80
26144	Slotted Base	Indicating	$2\frac{35}{32}$ ins.	$1\frac{3}{4}$ ins.	10	30	17	1.00	1.80

#### 15 Amperes, 125 Volts; 10 Amperes, 250 Volts

2496▲	Solid Base	Plain	3½ ins.	2 % ins.	1	30	38	\$1.70  \$3.06
<b>2497</b>	Slotted Base	Plain	$3\frac{1}{2}$ ins.	$2\frac{10}{16}$ ins.	1	30	38	1.70 3.06
<b>2498</b>	Solid Base	Indicating	3½ ins.	$2\frac{9}{16}$ ins.	1	30	38	1.80 3.24
<b>24</b> 99 <b>^</b>	Slotted Base	Indicating	$3\frac{1}{2}$ ins.	$2\frac{9}{16}$ ins.	1	30	38	1.80 3.24

#### TWO SECTIONS. CONNECTIONS 1 & 2, 1, OFF

These switches operate as follows: First turn connects sections One and Two. Second turn connects section One. Third turn, Off.

#### \*10 Amperes, 125 Volts; 5 Amperes, 250 Volts

2607	Solid Base	Plain	$ 2\frac{13}{32}$ ins. $ 1\frac{3}{4} $	ns.   10	30	17	\$0.90 \$1.62
2608	Slotted Base	Plain	$2\frac{11}{12}$ ins. $1\frac{3}{4}$ i	ns.   10	30	17	90 1.62
2609	Solid Base	Indicating	$2\frac{13}{13}$ ins. $1\frac{3}{4}$ i	ns. 10	30	17	1.00 1.80
<b>2610</b> <sup>4</sup>	Slotted Base	Indicating	$ 2\frac{1}{3}\frac{3}{4}$ ins. $ 1\frac{3}{4}$ i	ns.   10	30	17	1.00 1.80

### 15 Amperes, 125 Volts; 10 Amperes, 250 Volts

2486	Solid Base	Plain	$  3\frac{1}{2} $ ins.	2 ins.	1	30	38	\$1.70  \$3.06
2487	Slotted Base	Plain	$3\frac{1}{2}$ ins.		1	30	38	1.70 3.06
<b>2488</b>	Solid Base	Indicating	3⅓ ins.		1	30	39	1.80 3.24
<b>2489</b>	Slotted Base	Indicating	$13\frac{1}{2}$ ins.	2 9 ins.	1	30	39	1.80 3.24

#### TWO SECTIONS. CONNECTIONS 1, 1 & 2, OFF \*10 Amperes, 125 Volts; 5 Amperes, 250 Volts

	(2.11)	DI :	0.15	1 197	10	1 00	1.0	1.00.000	
2602	Solid Base	Plain	$ 2\frac{15}{2}$ ins.	1 3/4 ins.	10	30	16	\$0.90	\$1.62
<b>2603</b> <sup>4</sup>	Slotted Base	Plain	$2\frac{15}{15}$ ins.	-13/4 ins.	10	30	16	.90	1.62
2604	Solid Base	Indicating	$2\frac{15}{32}$ ins.	$1\frac{3}{4}$ ins.	10	30	16	1.00	1.80
2605*	Slotted Base	Indicating	$2\frac{15}{33}$ ins.	13/4 ins.	10	30	16	1.00	1.80

#### 15 Amperes, 125 Volts; 10 Amperes, 250 Volts

2482	Solid Base	Plain	$  3\frac{1}{2} $ ins.		1	30	39	\$1.70  \$3.	06
2483	Slotted Base	Plain	$3\frac{1}{2}$ ins.	$2\frac{9}{16}$ ins.	1	30	39	1.70 3.	06
2484	Solid Base	Indicating	3½ ins.	$2\frac{9}{16}$ ins.	1	30	39	1.80 3.	24
2485	Slotted Base	Indicating	3½ ins.	$2\frac{9}{16}$ ins.	1	30	39	1.80 3.	24



The above switches may be converted into lock switches by the use of the Lock Attach-

\*When specified, round handles will be furnished on the above switches without extra charge. Digitized by GOOGLE

With Porcelain Covers and Handles







No. 2231



No. 2632



No. 2244

#### \*SINGLE POLE 5 Amperes, 125 Volts; 3 Amperes, 250 Volts

Schedule "S"

Wiring Devices

List No.			Diameter of Base	Screws Spaced on Centers	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Èach
2625 <sup>4</sup> 2626 <sup>4</sup> 2627 <sup>4</sup> 2628 <sup>4</sup>	Solid Base	Plain Plain Indicating Indicating	$\begin{array}{c} 2\frac{5}{16} \text{ ins.} \\ 2\frac{5}{16} \text{ ins.} \\ 2\frac{5}{16} \text{ ins.} \\ 2\frac{5}{16} \text{ ins.} \\ 2\frac{5}{16} \text{ ins.} \end{array}$	1 7 ins. 1 7 ins. 1 7 ins. 1 7 ins. 1 7 ins.	1 1 1 1	30 30 30 30	17 17 17 17	\$0.32 .32 .36 .36	. 58 . 65

#### SINGLE POLE 10 Amperes, 125 Volts; 5 Amperes, 250 Volts

2231*	Solid Base	Plain	25% ins.	13/4 ins.	1	30	25	\$0.64	\$1.15
2232	Slotted Base	Plain	$2\frac{5}{8}$ ins.	$1\frac{3}{4}$ ins.	1	30	25	. 64	
2205	Solid Base	Indicating	$2\frac{5}{8}$ ins.	$1\frac{3}{4}$ ins.	1	30	25	.74	
2206	Slotted Base	Indicating	$2\frac{5}{8}$ ins.	13/4 ins.	1	30	-25	.74	1.33

#### **DOUBLE POLE** 5 Amperes, 250 Volts

2632 Slotted Base Indicating $2\frac{1}{16}$ ins. $1\frac{1}{16}$ ins. $1$ 10 8	2629 <sup>4</sup> 2630 <sup>4</sup> 2631 <sup>4</sup> 2632 <sup>4</sup>	Solid Base Slotted Base Solid Base	Plain Plain Indicating	$2\frac{5}{16}$ ins. $2\frac{5}{16}$ ins. $2\frac{5}{16}$ ins. $2\frac{5}{16}$ ins.	1 7/6 ins. 1 1/6 ins. 1 1/6 ins.	1 1 1	10 10 10	8 8 8	\$0.52 .52 .60 .60	1.08
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#### **DOUBLE POLE** 10 Amperes, 250 Volts

2244	Solid Base	Plain	$2\frac{5}{8}$ ins.	13/4 ins.	1	10	9	\$0.82	\$1.48
2245	Slotted Base	Plain	$2\frac{5}{8}$ ins.	13/4 ins.	1	10	9	.82	1.48
2207	Solid Base	Indicating	$2\frac{5}{8}$ ins.	13/4 ins.	1	10	10	.92	
2208	Slotted Base	Indicating	$2\frac{5}{8}$ ins.	13/4 ins.	1	10	10	.92	1.66

#### THREE-WAY 5 Amperes, 125 Volts; 3 Amperes, 250 Volts

2633▲ 2634▲	Solid Base	Plain Plain	$2\frac{5}{16}$ ins. $2\frac{5}{16}$ ins.	1 7 ins.   1 7 ins.	1	10 10	8 8	<b>\$0</b> .52	\$0.94 .94

# THREE-WAY

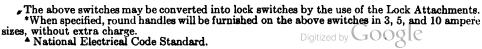
### 10 Amperes, 125 Volts; 5 Amperes, 250 Volts

2209	Solid Base	Plain	25% ins.		1	10	10	\$0.92 \$1.66
2210	Slotted Base	Plain	$2\frac{5}{8}$ ins.	13/4 ins.	1	10	10	.92 1.66

## **FOUR-WAY**

#### 10 Amperes, 125 Volts; 5 Amperes, 250 Volts

2234 <sup>▲</sup> 2235 <sup>▲</sup>	Solid Base Slotted Base	Plain Plain	$2\frac{5}{8}$ ins. $2\frac{5}{8}$ ins.	$1\frac{3}{4}$ ins. $1\frac{3}{4}$ ins.	1   10 1   10	9	\$1.02 \$1.84 1.02 1.84



With Porcelain Covers and Handles







No. 2676



No. 2246

# Electrolier Type

THREE SECTIONS. CONNECTIONS 1, 2, 3, OFF 10 Amperes, 125 Volts; 5 Amperes, 250 Volts

Schedule "S"

List No.			Diameter of Base	ScrewHoles Spaced on a Circle	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
2747▲	Solid Base	Plain	25% ins.	13/4 ins.	1	10	10	\$1.06	\$1.91
2748	Slotted Base	Plain	$2\frac{5}{8}$ ins.	13/4 ins.	1	10	10	1.06	1.91
2749	Solid Base	Indicating	25% ins.	134 ins.	1	10	10	1.16	2.09
2750	Slotted Base	Indicating	25% ins.	134 ins.	1	10	10	1.16	2.09

# THREE SECTIONS. CONNECTIONS 1, 1 & 2, 1 & 2 & 3, OFF 10 Amperes, 125 Volts; 5 Amperes, 250 Volts

2240	Solid Base	Plain	25% ins.   134 ins.	1	10	9	\$1.06 \$1.91
2241	Slotted Base	Plain	$2\frac{5}{8}$ ins. $1\frac{3}{4}$ ins.	1	10	9	1.06 1.91
2242	Solid Base	Indicating	25% ins.   134 ins.	1	10	. 9	1.16 2.09
<b>2243</b>	/ Slotted Base	Indicating	$2\frac{5}{8}$ ins. $1\frac{3}{4}$ ins.	1	10	9	1.16 2.09

# TWO SECTIONS. CONNECTIONS 1, 2, 1 & 2, OFF 10 Amperes, 125 Volts; 5 Amperes, 250 Volts

2673▲	Solid Base	Plain	25% ins.   134 ins.	1	1 10	10	\$0.96 \$1.73
2674	Slotted Base	Plain	$2\frac{5}{8}$ ins. $1\frac{3}{4}$ ins.	1	10	10	.96 1.73
2675	Solid Base	Indicating	$2\frac{5}{8}$ ins. $1\frac{3}{4}$ ins.	1	10	10	1.06 1.91
2676	Slotted Base	Indicating	$  2\frac{5}{8}$ ins. $  1\frac{3}{4}$ ins. $  $	1	10	10	1.06 1.91

# TWO SECTIONS. CONNECTIONS 1, 1 & 2, 1, OFF 10 Amperes, 125 Volts; 5 Amperes, 250 Volts

2236	Solid Base	Plain	25/8 ins.   13/4 ins.	1	10	9	\$0.96 \$	1.73
2237	Slotted Base	Plain	$2\frac{5}{8}$ ins. $1\frac{3}{4}$ ins.	1	10	9	. 96	1.73
22384	Solid Base	Indicating	$2\frac{5}{8}$ ins. $1\frac{3}{4}$ ins.	1	10	9	1.06	1.91
2239	Slotted Base	Indicating	$ 2\frac{5}{8}$ ins. $ 1\frac{3}{4}$ ins. $ $	1	10	9	1.06	1.91

# TWO SECTIONS. CONNECTIONS 1, 1 & 2, 2, OFF 10 Amperes, 125 Volts; 5 Amperes, 250 Volts

2246	Solid Base	Plain	$  2\frac{5}{8} $ ins. $  1\frac{3}{4} $ ins. $ $	1	10	1 9	\$0.96  \$1.73
2247	Slotted Base	Plain	$2\frac{5}{8}$ ins. $1\frac{3}{4}$ ins.	1	10	9	.96 1.73
2248	Solid Base	Indicating	$2\frac{5}{8}$ ins. $1\frac{3}{4}$ ins.	1	10	9	1.06 1.91
<b>2249</b>	Slotted Base	Indicating	25% ins.   134 ins.	1	10	9	1.06 1.91

# TWO SECTIONS. CONNECTIONS 1, 2, OFF 10 Amperes, 125 Volts; 5 Amperes, 250 Volts

2739	Solid Base	l Plain	25/8 ins.   13/4 ins.	1	10	10	\$0.96 \$1.73
2740	Slotted Base	Plain	25% ins.   134 ins.	1	10	10	.96 1.73
2741	Solid Base	Indicating	25% ins. 134 ins.	1	10	10	1.06 1.91
<b>27</b> 42▲	Slotted Base	Indicating	$12\frac{5}{8}$ ins. $13\frac{7}{4}$ ins.	1	10	10	[ 1.06  <b>1.91</b>

The above switches may be converted into lock switches by the use of the Lock Attachments.

When specified, round handles will be furnished on the above switches in 3, 5, and 10 ampere sizes, without extra charge.

A National Electrical Code Standard.

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## "H & H" ROTARY FLUSH SWITCHES







No. 2681



No. 3055

## Electrolier Type

TWO SECTIONS. CONNECTIONS 1, 1 & 2, 1, OFF

Schedule "S"

These switches operate as follows: First turn connects section One. Second turn connects sections One and Two. Third turn connects section One. Fourth turn, Off.

#### 5 Amperes, 125 Volts; 2 Amperes, 250 Volts

List No.		Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
609	Plain	10	10	8	\$1.05	\$1.89
_2886▲	Indicating	10	10	8	1.15	2.07

### TWO SECTIONS. CONNECTIONS 1, 1 & 2, 2, OFF

These switches operate as follows: First turn connects section One. Second turn connects sections One and Two. Third turn connects section Two. Fourth turn, Off.

5 Amperes, 125 Volts: 2 Amperes,
----------------------------------

619	Plain	10	1 10	8	\$1.05 \$1.89
2887	Indicating	10	10	8	1.15 2.07

#### TWO SECTIONS. CONNECTIONS 1, 2, 1 & 2, OFF

These switches operate as follows: First turn connects section One. Second turn connects section Two. Third turn connects sections One and Two. Fourth turn, Off.

#### 5 Amperes, 125 Volts; 2 Amperes, 250 Volts

2681	Plain	10	1Q	8	\$1.05  \$1.89
2888▲	Indicating	10	10.	8	1.15 2.07

## THREE SECTIONS. CONNECTIONS 1, 1 & 2, 1 & 2 & 3, OFF

These switches operate as follows: First turn connects section One. Second turn connects sections One and Two. Third turn connects sections One, Two and Three. Fourth turn, Off.

#### 5 Amperes, 125 Volts; 2 Amperes, 250 Volts

605▲	Plain	10	10	8	\$1.05 \$1.89
2885≜	Indicating	10	10	8	1.15 2.07

#### THREE SECTIONS. CONNECTIONS 1, 2, 3, OFF

These switches operate as follows: First turn connects section One. Second turn connects section Two. Third turn connects section Three. Fourth turn, Off.

#### 5 Amperes, 125 Volts; 2 Amperes, 250 Volts

3055▲	Plain	10	10	.8	\$1.05  <b>\$1.89</b>
2980	Indicating	10	10	8	1.15 2.07

Depth of switches without plate: 5 ampere size, 1\frac{3}{8} inches. 10 ampere size, 1\frac{1}{12} inches. Supporting screw holes are spaced as follows, both on 5 ampere and 10 ampere switches: Outside supporting screw holes,  $2\frac{\pi}{16}$  inches on centers. Inside supporting screw holes,  $2\frac{\pi}{16}$  inches on centers.



The above switches may be converted into lock switches by the use of the Lock Attachment. When specified, round handles will be furnished on the above switches in 3, 5 and 10 ampere sizes, without extra charge.

A National Electrical Code Standard. Digitized by GOOGLE

## "H & H" RECEPTACLES AND SWITCHES







No. 2934

Base Board Receptacle

No. 2034

Schedule "H"

List No.	0	Amperes	Volts	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
2934▲	Receptacle complete	10	250	1	30	35	\$1.00	\$1.80
3001▲	Base only			10	30	16	40	.72
3002▲	Plug only			10	30	7	.25	.45
3011▲	Plate only			10	30	15	.35	. 63

Plates in gangs are spaced 113 inches between centers. Outside supporting screw holes are spaced  $3\frac{9}{32}$  inches on centers. Inside supporting screw holes are spaced  $2\frac{13}{16}$  inches on centers.

Dirt Proof Base Board Receptacle

10	125	1	30	31	\$1.40	\$2.52
		10	30	15	.50	.90
		10	30	5	.25	.45
		15	30	15	.65	1.17
	10	11 111	10	10   30	10   30   15	10 30 15 .50 10 30 5 .25

These receptacle plates may be furnished in gangs, and also in gang combinations with switch plates. Receptacles in gangs are spaced 113 inches between centers. Outside supporting screw holes are spaced  $3\frac{9}{32}$  inches on centers. Inside supporting screw holes are spaced  $2\frac{13}{16}$  inches on centers.







No. 2532



No. 2022



No. 3047

Pendent Switch

Schedule "H"

List No.		Carton Quantity	Std. Pkg.		Mfrs. List Each	W. E. List Each
2532▲	S. P. 6 amp. 125 v.; 3 amp. 250 v	10	100	32	\$0.50	\$0.90

Standard finish polished brass. No extra charge for brush brass.

For other finishes, except gold and silver, add 15 cents to the list price.

	Automatic Door Switch	h		s	chedule	"S"
2022	S. P. 6 amp. 125 v.; 3 amp. 250 v	10	30	22	1 2.25	4.05
2023	S. P. 6 amp. 125 v.; 3 amp. 250 v	10	10	10	2.25	4.05
146-	No 2022 Light on when door is enough Mf- No 20	99 T:	aba an	ban d	an in ala	

Mfr. No. 2022. Light on when door is opened. Mfr. No. 2023. Light on when door is closed. The shell of the switch is of sheet steel .081 inch in thickness. Dimensions of plate,  $3\frac{3}{4} \times 1\frac{1}{4}$  inches. Opening required,  $2\frac{5}{8} \times 1\frac{1}{16}$  inches. Depth,  $1\frac{3}{4}$  inches.

Wall Case for Door Switch

Schedule "H"

A special wall case is made for this switch, to be used with flexible non-metallic conduit or with iron conduit, with knockout outlets for  $\frac{5}{16}$  inch and  $\frac{7}{16}$  inch conduit.

List No.		Dimensions	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	List
3047▲	For one door switch	$1\frac{1}{4} \times 2\frac{7}{8} \times 2\frac{3}{4}$ ins.	1	30	20	\$0.40	\$0.72

▲ National Electrical Code Standard.

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# DIAMOND "H" PUSH BUTTON SWITCHES



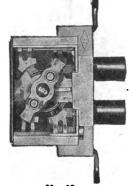
No. 50 Side View Showing Enclosed Mechanism



No. 065 Lock Push Button Switch



Key for Lock Switch Push Button Type

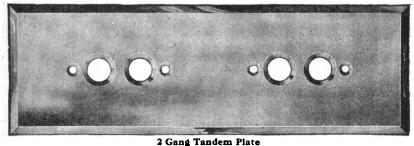


No. 69 Mechanism of Momentary Contact Switch

## Push Button Switches

Laboratory Ratings. Single pole, 3 way and 4 way, 10 amperes, 125 volts—5 amperes, 250 volts. Double pole, 10 amperes, 250 volts. Shallow base, 1½ inches deep. Switch supporting screws  $3\frac{9}{32}$  inches center to center.

List		Std.	Mfrs. List	W. E. List
No.		Pkg.	Each	Each
†050	Single Pole, without plates	100	\$0.50	\$1.00
†060	Double Pole, without plates	50	.70	1.40
†070	3 Way, without plates	50	.70	1.40
1080	4 Way, without plates	10	2.00	4.00
†055	Single Pole, lock type, without plate	100	.95	1.90
1065	Double Pole, lock type, without plate	50	1.15	2.30
†075	3 Way, lock type, without plate	50	1.15	2.30
†085	4 Way, lock type, without plate	10	2.45	4.90
e divide	MOMENTARY CONTACT SWITCH			
	6 Amperes, 125 Volts—3 Amperes, 250 volts.			
095	Momentary Contact Switch, lock type without plate	25	\$2.85	\$5.70
09	Momentary Contact Switch, without plate	25	2.40	4.80



Push Button Switch Plates

All plates are made of hard brass, 1/8 inch thick, with edges milled to the correct dimensions.

List No.	Dimensions	Std. Pkg.	Mfrs. List Ea.	W. E. List ListEach No.	Dimensions	Std. Pkg.	Mfrs. W. E List Ea. ListEac
1	23/4 x 41/2 inches, 1 gang		\$0.60 1.10	\$1.20 6 2 20 7	11 11 x 4 1/2 inches, 6 gang	1 .	\$3.10 \$6.20
3	$4\frac{9}{16} \times 4\frac{1}{2}$ inches, 2 gang $6\frac{3}{8} \times 4\frac{1}{2}$ inches, 3 gang	•	1.60		$13\frac{5}{8} \times 4\frac{1}{2}$ inches, 7 gang $15\frac{7}{16} \times 4\frac{1}{2}$ inches, 8 gang		3.60   7.20 4.10   8.20
4	$8_{16} \times 4\frac{1}{2}$ inches, 4 gang	:	2.10		$17\frac{1}{4} \times 4\frac{1}{2}$ inches, 9 gang	*	4.60 9.20
5_	$110 \times 4\frac{1}{2}$ inches, 5 gang	1 -	2.60	5.20  10	$19\frac{1}{16} \times 4\frac{1}{2}$ inches, 10 gang		5.10   <b>10.2</b> 0

#### Tandem Style

1111 23/4 x 41/2 inches,			1112	$4\frac{9}{16} \times 4\frac{1}{2}$ inches,	21 21 22 12
stamped 060 brass		<b>\$</b> 0.69	\$1.38	stamped 060 brass	\$1.24 <b>\$2</b> .48
2 $2\frac{3}{4}$ x $8\frac{7}{16}$ inches, 2 gang		1.10		23/4 x 16 inches, 4 gang.	2.10 4.20
$3  2\frac{3}{4} \times 12\frac{7}{32}$ inches, 3 gang	*	1.60	3.20 5	23/4 x 1935 inches, 5 gang.	3.10 <b>6.20</b>

\*100 single plates or equivalent in gangs is a standard package.

Polished nickel, polished brass, old or brush brass, polished bronze and oxidized copper are standard finishes.

For special finishes, add to list per switch \$0.24. Mfrs. List \$0.12.

†100 push button switches assorted also constitute a standard package.

# DIAMOND "H" ROTARY FLUSH SWITCHES







No. 802 Off-High-Med.-Low

No. 831 Off-Low-Med.-High

No. 802 With Outside Dial

SERIES-PARALLEL HEATER TYPE These switches have been specially designed for use on heating and cooking apparatus. Off-High-Medium-Low. Furnished with Inside or Outside Dials

List No.	Style	Std. Pkg.	Mfrs. List Each	W. E. List Each	
801	1½ amperes, 250 volts, 400 watts	100	\$0.76	\$1.52	
802	3 amperes, 250 volts, 800 watts	100	.97	2.48	
803	7½ amperes, 250 volts, 1800 watts	100	1.35	3.40	
804	12 amperes, 250 volts, 3000 watts	30	1.70	4.32	
	Off—Low—Medium—High		3,5,6,60		
830	1 ampere, 250 volts, 250 watts	100	\$0.76	\$1.52	
831	2½ amperes, 250 volts, 700 watts	100	.97	2.48	
832	5 amperes, 250 volts, 1200 watts	100	1.35	3,40	
833	8 amperes, 250 volts, 2000 watts	30	1.70	4.32	

ROTARY FLUSH SWITCHES

Rotary Flush Switches can be converted into lock switches by removing the handles and substituting a rotary lock attachment, which can be operated only by a special key. Without Plates

		TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT			
List No.	Style	Rating •	Std. Pkg.	Mfrs. List Each	W. E. List Each
0105	Single pole	5 amperes, 125 volts—3 amperes, 250 volts	100	\$0.56	\$1.12
0110	Single pole	10 amperes, 125 volts—5 amperes, 250 volts	50	.64	1.28
0120	Double pole	10 amperes, 250 volts	50	.96	1.92
0130	3 way	10 amperes, 125 volts—5 amperes, 250 volts	50	.96	1.92
0140	4 way	5 amperes, 125 volts—2 amperes, 250 volts	10	.96	1.92
0150	2 Pt. El.	5 amperes, 125 volts—2 amperes, 250 volts	10	. 96	1.92
0160	3 Pt. El.	5 amperes, 125 volts—2 amperes, 250 volts	10	.96	1.92
		With Plates			
105	Single pole	5 amperes, 125 volts—3 amperes, 250 volts	100	\$1.21	\$2.42
110	Single pole	10 amperes, 125 volts—5 amperes, 250 volts	50	1.29	2.58
120	Double pole	10 amperes, 250 volts	50	1.61	3.22
130	3 way	10 amperes, 125 volts—5 amperes, 250 volts	50	1.61	3.22
140	4 way	5 amperes, 125 volts—2 amperes, 250 volts	10	1.61	3.22
150	2 Pt. El.	5 amperes, 125 volts—2 amperes, 250 volts	10	1.61	3.22
160	3 Pt. El.	5 amperes, 125 volts—2 amperes, 250 volts	10	1.61	3.22
		DOTADY FLUCUI LOCK COUTCUES			

ROTARY FLUSH LOCK SWITCHES

Key only extre

\$0.00 Pull attachment extre Lock attachment, extra. \$0.18

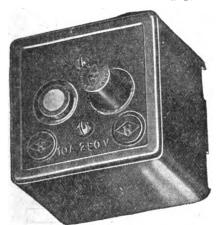
LOC	LOCK attachment, extra			ney or	Rey only, extra 30.09 Full attachment, extra 3						
	Plates for Rotary Flush Switches										
List No.		Dimensions, Ins.			W. E. List Each	List No.		Dimensions, Inc.	Std. Pkg.	Mfrs. List Each	W. E. List Each
1	1 gang	$2\frac{3}{4} \times 4\frac{1}{2}$	*	<b>\$</b> 0.65	\$1.30	6	6 gang	11 13 x 4 1/2	*	<b>\$</b> 3.90	<b>\$7</b> .80
2	2 gang	$4\frac{9}{16} \times 4\frac{1}{2}$	*	1.30	2.60	7	7 gang	$13\frac{5}{8} \times 4\frac{1}{2}$	*	4.55	9.10
3	3 gang	$6^{3}_{8} \times 4\frac{1}{2}$	*	1.95	3.90	8	8 gang	$15\frac{7}{16} \times 4\frac{1}{2}$	*	5.20	10. <b>4</b> 0
4	4 gang	$8\frac{3}{16} \times 4\frac{1}{2}$	*	2.60	5.20	9	9 gang	$17\frac{14}{4} \times 4\frac{1}{2}$	*	5.85	11.70
5	5 gang	$10^{\circ} \times 4\frac{1}{2}$	*	3.25	6.50	10	10 gang	$19\frac{1}{16} \times 4\frac{1}{2}$	*	6.50	13.00
					Ta	nder	n Style				
2	2 gang	$2\frac{3}{4} \times 8\frac{7}{18}$	•	\$1.30	\$2.60	4	4 gang	$2^{3}4 \times 16$	*	<b>\$2.60</b>	\$5.20
3	3 gang		*	1.95	3.90	5	5 gang		*	3.25	6.50
	*100 single plates or equivalent in generalise a standard nackage										

\*100 single plates or equivalent in gangs is a standard package.

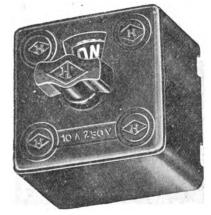
Special finishes, add to list per switch \$0.24. Mirs. list \$0.12. Polished nickel, polished brass, old or brush brass, polished bronze and oxidized copper are standard finishes.

Gold and silver finishes are not included in the above price for special finish. Prices on application.

# "DIAMOND H" SWITCHES



No. 061 DP Panel Board Surface Switch Push Button Type

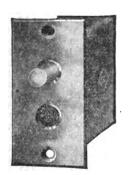


No. 1222 DP Panel Board Switch Rotary Type

Schedule "S"

# Panel Board Type Surface Switches PUSH BUTTON TYPE

			Mfrs.	W. E.	II .			Mfrs.	W. E.
List		Std.	List	List	List		Std.	List	List
No.	Style	Pkg.	Each	Each	No.	Style	Pkg.	Each	Each
061	Double pole without cover.	100	\$0.88	\$1.06	1221	Single pole	100	\$0.72	\$0.86
	Double pole with cover					Double pole	100	1.12	1.34
	Supporting screws 13 center	er to	center o	over 2 x	2 inches.				



Single Battery Switch



Battery Switch Showing Mechanism



No. 601 Door Switches

	Push	Butte	on S	witches	Schedule "S"		
Std.	Mfrs. List	W. E. List	List		Std	Mfrs. List	W. E List
kg. 100	Each \$0.70	Each \$0.84	No. 331	Type	Pkg. 100	Each \$0.80	Each \$0.96

									-
List		Std.	Mfrs. List	W. E. List	List		Std	Mfrs. List	W. E List
No.	Туре	Pkg.	Each	Each	No.	Type	Pkg.	Each	Each
31	Single pole	100 .	\$0.70	<b>\$</b> 0.84	331	3 way single	10 <b>0</b>	<b>\$0</b> .80	\$0.96
	2 gang	50	1.40	1.68	631	Automatic door switch.	100	. <b>7</b> ა	. 84
	3 gang	35	2.10	2.52	13	2 circuit	50	1.50	1.80
34	4 gang	25	2.80	3.36	II .				

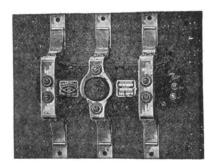
	<b>200. 201.00</b>			
	6 AMPERE 125 VOLT, 3 AMPERE 250 VO	LT	Sched	ule "S"
List	•	Std.	Mfrs. List	W. E. List
No.	•	Pkg.	Each	Each
601	Light on with door open	25	<b>\$</b> 2.2 <b>5</b>	<b>\$2.70</b>
602	Light off with door open	10	2 25	2.70
	Conduit box with clamp	• •	.40	. 48

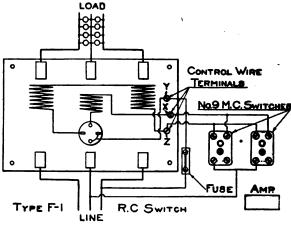
**Door Switches** 

Plates and strikes for door switch are made of hard brass  $\frac{3}{32}$  inch thick.

Delivery F. O. B. Hartford, Conn. For warehouse deliveries write nearest house

# "DIAMOND H" REMOTE CONTROL SWITCHES





Remote Control Switch Type F-1

Wiring Diagram Type F-1

## Type F-1 Remote Control Switch

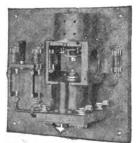
The remote control switch is located where the circuit is to be opened and closed. The push button may be located wherever convenient, at any distance from the switch or, if desired, several push buttons may be used to operate the same switch from different locations.

The remote control switch is useful for controlling small motors or groups of sign lamps, as well as for

the service mentioned above, and is a saver of time and trouble wherever used.

The solenoids that operate the switch are located at each end of the switch housing directly under the brush yokes, and give a straight pull without rocking or cramping. The releasing solenoid is in the center of the housing and operates on the locking mechanism direct. All working parts are entirely enclosed and cannot become damaged through rough usage. All wearing parts are of case-hardened and tempered steel.

List	n.l.	Amp.	Mfrs. List	W. E. List
No.	Pole	Capacity	Each	Each
730	Double pole, single throw	25	<b>\$3</b> 6.00	<b>\$43</b> .20
740	Double pole, single throw	50	48.00	<b>57</b> . <b>60</b>
750	Double pole, single throw	75	60.00	72.00
760	Double pole, single throw	100	93.60	112.32
770	Double pole, single throw	150	108.00	120.96
780	Double pole, single throw	200	122.40	146.88
790	Triple pole, single throw	25	43.20	51.84
800	Triple pole, single throw	50	.54.00	64.80
810	Triple pole, single throw	75	<b>67</b> .20	80 . 64
820	Triple pole, single throw	100	108.00	120.96
830	Triple pole, single throw	150	124.80	149.76
840	Triple pole, single throw	200	139.20	167.04
610	Four pole, single throw	25	54.00	64.80
620	Four pole, single throw	50	68.00	81.60
630	Four pole, single throw	75	112.00	134.40
640	Four pole, single throw	100	128.00	<b>153</b> . <b>60</b>



# Type A Remote Control Switch CONTINUOUS CURRENT, NO VOLTAGE RELEASE

For the remote control of small motors, for vacuum cleaners, automatic elevators, etc. W. E.

List No.	Pole	Amp. Capacity	List Each	List Each
605	Double pole	30	\$48.00	<b>\$57.60</b>
615	Double pole	50	54.00	64.80
625	Triple pole	30	60.00	72.00
635	Triple pole	50	68.00	81.60

Remote Control Switch Type A

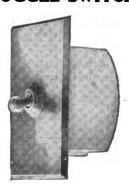
List No.	Tank Switch	Mfrs. List Each	W. E. List rEach
72	Tank switch with float	\$25.00	\$30.00
721	Tank switch without float	10.00	12.00

Delivery F. O. B. Factory, Hartford, Conn. For warehouse deliveries write nearest house. Wiring Devices 172

# Western Electric

# Western Electric

#### TOGGLE SWITCH



Single Gang Toggle Switch Complete with Plate

## Toggle Switches and Plates

The idea of a switch mechanism operated by means of a toggle is not a new one, although it has been introduced into this country only recently. This type of switch has been in operation in Europe for a number of years, but its mechanism has never been up to the standard demanded in the United States. We are now able to offer a thoroughly improved switch mechanism which has been passed by the Board of Fire Underwriters and one which we can guarantee to stand up under the most severe conditions.

In presenting the Western Electric Toggle Switch to the trade and public, we feel we have embodied therein the last word in switch making from the standpoints of operating convenience and artistic appearance. The drawbacks to other types of switches have all been eliminated. There are no unsightly screws or buttons to mar the appearance of the device, and the plate has been reduced in size to a minimum. All that appears on the wall is a well finished, neat looking plate with a toggle in the center. This plate can be concealed further by sinking it flush with the wall and giving it a coat of paint which will give it the appearance of being a combination of the room wall, the toggle being the only indication of the presence of a switch.

The toggle movement is the most natural one for the operation of a switch. In fact, it is the most instinctive, and once a person has made use of it, there is no desire to go back to any of the older types Furthermore, there is no mistaking what to do when it becomes necessary to turn on the switch in the dark. Take hold of the toggle and the light will be on as soon as you move it.

The artistic effects and finishes possible with the Western Electric Toggle Switch are not feasible with any other type of switch. Either with a single plate or in gangs, and with the same finish for both plate and toggle or with a different finish for each, remarkably striking effects can be obtained, which will appeal greatly to architects.

The Western Electric Toggle Switch is furnished in single pole, double pole, three-way and four-way. The standard finish of the plate is brush brass and all prices for plates listed in this catalog are on this basis. We are prepared, however, to furnish special finishes for which prices will be quoted on application.

The standard switch plate adopted for the Western Electric Toggle Switch is of the following dimensions: 25% x 4. These plates will fit all standard outlet box covers in use at the present time. If smaller plates are desired, we are prepared to furnish them in the same finish and of the following dimensions: 23% x 3½. These plates will not fit the standard outlet box cover, but will take a special Western Electric cover which we can furnish and which will fit any standard outlet box. The switch itself will fit any standard outlet box. All switches are packed in cartons of ten.

		Switch	105		
				W. E. List Prices	
Cat. No.		Mfrs. List	Less than 10	10 to 50	Over 50
101	Single pole	<b>\$</b> 0.75	\$1.50	\$1.28	\$1.08
102	Double pole	.95	1.90	1.62	1.37
103	3 way	.95	1.90	1.62	1.37
104	4 way	2.25	4.50	3.83	3.24
		Plate	8		
201	Single gang	\$0.25	\$0.50	\$0.43	\$0.36
202	Two gang	.50	1.00	. 85	.72
203	Three-gang	.75	1.50	1,28 T	1.08
204	Four-gang	1.00	2.00 Digitized	by 12.70 8 IC	1.44
				Wir	ing Devices

NATIONAL ELECTRICAL CODE STANDARD

# Single Pole—Single Throw—Mounted on Slate Base FRONT CONNECTION—PLAIN FINISH



Switch Prices do not Include Fuses



	Without Fuse Connections 250 VOLTS D. C. AND A.C.			With Fuse Connections 250 VOLTS D. C. AND A. C.		
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List Price	
30 60 100 200 300 400 600	540000 540001 540002 540003 540004 540005 540006	\$1.60 2.40 4.50 6.96 10.68 16.28 23.08	30 60 100 200 - †300 400 600	540021 540022 540023 540024 540025 540026	\$2.36 3.48 6.68 10.28 23.28 32.68	
** 800 1000 1200 1500 2000	540007 540008 540009 540010 540011	40.00 45.36 54.68 82.00 109.36	800 1000 1200 1500 2000	540027 540028 540029	52.68 60.68 71.36	

For polished finish 30 to 200 Ampere add 30%, over 200 Ampere 20%. For further notes see bottom of page.

## Single Pole—Single Throw—Unmounted BACK CONNECTION—POLISHED FINISH



Switch Prices do not Include Fuses



Without Fuse Connections 250 VOLTS D. C. AND A. C.			With Fuse Connections 250 VOLTS D. C. AND A. C.				
Amperes Capacity of Switch	List No.					List No. List Price	
30 60 100 200 300	540030 540031 540032 540033 540034	\$1.92 3.00 5.08 7.80 11.88	30 60 100 200 †300	540051 540052 540053 540054	\$2.48 3.76 7.04 10.64		
400 600 800	540035 540036 540037	16.96 24.40 42.92	400 600 800	540055 540056 540057	22.56 32.72 54.12		
1000 1200 1500 2000	540038 540039 540040 540041	46.76 58.08 77.00 105.60	1000 1200 1500 2000	540058 540059	61.16 73.72		

All Single Throw Switches furnished fused at handle end unless otherwise ordered. No extra charge for fuse connections at hinge end. For plain finish back connected 30 to 400 Ampere switches deduct

10%, over 400 ampere 5%.

Fuseless Switches are furnished with Regular Jaws only. Fusible Switches are furnished with High Jaws only. Switches over 800 ampere equipped with Spade Handles.

For Quick Break Attachments see listing elsewhere. For Double Break Switches add 50%.

† 300 Ampere Fusible Switch not permitted by Code. Digitized by GOO

NATIONAL ELECTRICAL CODE STANDARD

# Single Pole—Double Throw—Mounted on Slate Base

FRONT CONNECTION—PLAIN FINISH



Switch Prices do not Include Fuses

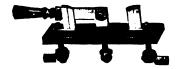


Without Fuse Connections 250 VOLTS D. C. AND A. C.			With Fuse Connections 250 VOLTS D. C. AND A. C.		
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List Price
30	540060	\$3.36	30	540072	\$4.56
60	540061	3.48	60	540073	6.16
100	540062	6.68	100	540074	12.40
200	540063	10.68	200	540075	12.68
300	540064	17.36	†300		1000
400	540065	25.08	400	540076	37.36
600	540066	34.68	600	540077	55.36
800	540067	56.00	800	540078	85.36
1000	540068	63.36	1000	540079	101.36
1200	540069	80.00	1200	540080	117.36
1500	540070	125.36	1500		90000
2000	540071	160.00	2000		

For polished finish 30 to 200 Ampere add 30%, over 200 Ampere 20%. For further notes see bottom of page.

# Single Pole—Double Throw—Unmounted

BACK CONNECTION—POLISHED FINISH



Switch Prices do not Include Fuses



Without Fuse Connections 250 VOLTS D. C. AND A. C.			With Fuse Connections 250 VOLTS D. C. AND A. C.		
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List Price
30	540081	\$2.76	30	540093	\$5.28
60	540082	4.08	60	540094	6.16
100	540083	7.04	100	540095	11.10
200	540084	11.20	200	540096	17.16
300	540085	17.16	†300		000
400	540086	24.76	400	540097	36.88
600	540087	34.68	600	540098	50.16
003	540088	61.60	800	540099	85.80
1000	540089	68.20	1000	540100	97.36
1200	540090	85.80	1200	540101	114.40
1500	540091	114.40	1500		
2000	540092	158.40	2000		The state of

Fuseless Switches are furnished with Regular Jaws only. Fusible Switches are furnished with High Jaws only. Switches over 800 Ampere equipped with Spade Handles. For plain finish back connected 30 to 400 Ampere Switches deduct 10%, over 400 Ampere 5%.

30 to 400 Ampere Switches deduct 10%, over 400 Ampere 5%.

For Quick Break Attachments see listing elsewhere. For Double Break Switches add 50%.

† 300 Ampere Fusible Switch not permitted by Code.

NATIONAL ELECTRICAL CODE STANDARD

Double Pole-Single Throw-Mounted on Slate Base FRONT CONNECTION—PLAIN FINISH



Switch Prices do not Include Fuses



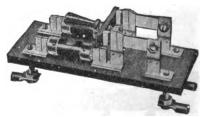
ections ND A. C.		n Fuse Connect LTS D. C. ANI	
List Price	Amperes Capacity of Switch	List No.	List Price
\$2.40 3.56 6.76 10.40 16.00 24.40 34.60 60.00 68.00 82.00 123.00	30 60 100 200 †300 400 600 800 1000 1200	540123 540124 540125 540126 540127 540128 540129 540130 540131	\$3.52 5.20 10.00 15.40 34.92 49.00 78.00 91.00 107.00
	3.56 6.76 10.40 16.00 24.40 34.60 60.00 68.00 82.00	3.56 6.76 10.40 16.00 24.40 34.60 60.00 88.00 82.00 123.00 60 100 1500	3.56     60     540124       6.76     100     540125       10.40     200     540126       16.00     †300       24.40     400     540127       34.60     600     540128       60.00     800     540129       68.00     1000     540130       82.00     1200     540131       123.00     1500

For polished finish 30 to 200 Ampere add 30%, over 200 Ampere 20%. For further notes see bottom of page.

#### Double Pole—Single Throw—Unmounted BACK CONNECTION—POLISHED FINISH



Switch Prices do not Include Fuses



Without Fuse Connections 250 VOLTS D. C. AND A. C.			With Fuse Connections 250 VOLTS D. C. AND A. C.		
List No.	List Price	Amperes Capacity of Switch	List No.	List Price	
540132 540133 540134 540135 540136	\$3.48 5.40 9.20 14.20 21.60	30 60 100 200	540153 540154 540155 540156	\$4.48 6.84 12.80 19.32	
540137 540138	30.80 44.40	400 600	540157 540158 540159	41.00 59.48 98.40	
540140 540141 540142	85.00 105.60 140.00	1000 1200 1500	540160 540161	111.20 134.00	,
	List No. 540132 540133 540134 540135 540136 540137 540138 540139 540140 540141	List No. List Price  540132 \$3.48 540133 5.40 540134 9.20 540135 14.20 540136 21.60 540137 30.80 540138 44.40 540139 78.00 540140 85.00 540141 105.60 540142 140.00	List No. List Price Capacity of Switch    List No.   List Price   Capacity of Switch	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

All Single Throw Switches furnished fused at handle end unless otherwise ordered. No extra charge

All Single Throw Switches furnished the set of the set

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NATIONAL ELECTRICAL CODE STANDARD

# Double Pole—Double Throw—Mounted on Slate Base

FRONT CONNECTION—PLAIN FINISH



Switch Prices do not Include Fuses

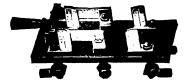


	Without Fuse Connections 250 VOLTS D. C. AND A. C.			With Fuse Connections 250 VOLTS D. C. AND A. C.		
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List Price	
30 60	540162 540163	\$3.52 5.20	30 60	540174 540175	\$6.80 9.20	
100 200	540164 540165	10.00 16.00 26.00	100 200	540176 540177	18.60 28.00	
300 400 600	540166 540167 540168	37.60 52.00	†300 400 600	540178 540179	56.00 83.00	
800 1000	540169 540170	84.00 95.00	800 1000	540180 540181	128.00 152.00	
1200 1500 2000	540171 540172 540173	120.00 188.00 240.00	1200 1500 2000	540182	176.00	

For polished finish 30 to 200 Ampere add 30%, over 200 Ampere 20%. For further notes see bottom of page.

# Double Pole—Double Throw—Unmounted

BACK CONNECTION—POLISHED FINISH



Switch Prices do not Include Fuses



Without Fuse Connections 250 VOLTS D. C. AND A. C.			With Fuse Connections 250 VOLTS D. C. AND A. C.		
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List Price
30	540183	\$5.00	30	540195	\$9.60
60	540184	7.40	60	540196	11.20
100	540185	12.80	100	540197	20.00
200	540186	20.40	200	540198	31.20
300	540187	31.20	†300		Other
400	540188	45.00	400	540199	67.00
600	540189	63.00	600	540200	91.20
800	540190	112.00	800	540201	156.00
1000	540191	124.00	1000	540202	177.00
1200	540192	156.00	1200	540203	208.00
1500	540193	208.00	1500		A STATE OF THE STA
2000	540194	288.00	2000		1900

Fuseless Switches are furnished with Regular Jaws only. Fusible Switches are furnished with High Jaws only. Switches over 800 Ampere equipped with Spade Handles. For plain finish back connected 30 to 400 Ampere switches deduct 10%, over 400 Ampere 5%.

For Quick Break Attachments see listing elsewhere. For Double Break Switches add 50%.

† 300 Ampere Fusible Switch not permitted by Code.

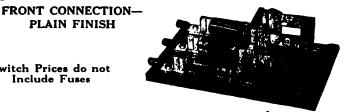
NATIONAL ELECTRICAL CODE STANDARD

# Three Pole—Single Throw—Mounted on Slate Base

PLAIN FINISH



Switch Prices do not Include Fuses

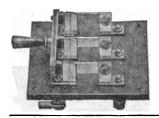


Without Fuse Connections 250 VOLTS D. C. AND A. C.			With Fuse Connections 250 VOLTS D. C. AND A. C.		
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	нідн List No.	JAWS List Price
30	540204	\$3.60	30	540225	\$5.28
60	540205	5.36	60	540226	7.80
100	540206	10.16	100	540227	15.00
200	540207	15.60	200	540228	23.12
300 <b>400</b>	540208 540209	24.00 36.60	†300 400	540229	52.40
600	540210	51.92	600	540230	73.50
800	540211	90.00	800	540231	118.50
1000	540212	102.00	1000	540232	136.50
1200	540213	123.00	1200	540233	160.50
1500 2000	540214 540215	184.50 246.00	1500 2000		

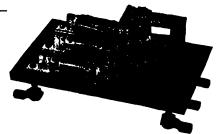
For polished finish 30 to 200 Amperes add 30%, over 200 Amperes 20%. For further notes see bottom of page.

# Three Pole—Single Throw—Unmounted

BACK CONNECTION-POLISHED FINISH



Switch Prices do not Include Fuses



Without Fuse Connections 250 VOLTS D. C. AND A. C.			With Fuse Connections 250 VOLTS D. C. AND A. C.			
Amperes	List	List	Amperes		JAW8	
Capacity of Switch	No.	Price	Capacity of Switch	List No.	List Price	
, 30	540234	\$5.20	30	540255	\$6.72	
60	540235	8.12	60	540256	10.28	
100	540236	13.80	100	540257	19.20	
200	540237	21.32	200	540258	29.00	
300	540238	32.40	†300			
400	540239	46.20	400	540259	61.50	
600	540240	66.60	600	540260	89.24	
800	540241	117.00	800	540261	147 60	
1000	540242	127.50	1000	540262	166.80	
1200	540243	158.40	1200	540263	201.00	
1500	540244	210.00	1500			
2000	540245	288.00	2000			

All Single Throw Switches furnished fused at handle end unless otherwise ordered. No extra charge for fuse connections at hinge end. For plain finish back connected 30 to 400 Ampere Switches deduct

10%, over 400 Ampere 5%.

Fuseless Switches are furnished with Regular Jaws only. Fusible Switches are furnished with High

Jaws only. Switches over 800 Ampere equipped with Spade Handles.

For Quick Break Attachments see listing elsewhere. For Double Break Switches add 50%.

†300 Ampere Fusible Switches not permitted by Code. Digitized by Google ....

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## Three Pole—Double Throw—Mounted on Slate Base FRONT CONNECTION—PLAIN FINISH



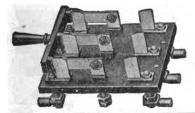
Switch Prices do not Include Fuses



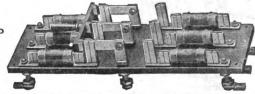
	Without Fuse Connections 250 VOLTS D. C. AND A. C.			With Fuse Connections 250 VOLTS D. C. AND A. C.			
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List Price		
30	540264	\$5.28	30	540276	\$10.20		
60	540265	7.80	60	540277	13.80		
100	540266	15.00	100	540278	27.92		
200	540267	24.00	200	540279	42.00		
300	540268	39.00	†300		1.00		
400	540269	56.40	400	540280	84.00		
600	540270	78.00	600	540281	124.50		
800	540271	126.00	800	540282	192.00		
1000	540272	142.50	1000	540283	228.00		
1200	540273	180.00	1200	540284	264.00		
1500	540274	282.00	1500		100		
2000	540275	360.00	2000				

For polished finish 30 to 200 Ampere add 30%, over 200 Ampere 20%. For further notes see bottom of page.

## Three Pole—Double Throw—Unmounted BACK CONNECTION—POLISHED FINISH



Switch Prices do not Include Fuses



	ut Fuse Connec		With Fuse Connections 250 VOLTS D. C. AND A. C.				
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List Price		
30	540285	\$7.50	30	540297	\$14.40		
60	540286	11.12	60	540298	16.80		
100	540287	19.20	100	540299	30.00		
200	540288	30.60	200	540300	46.80		
300	540289	46.80	†300				
400	540290	67.50	400	540301	100.50		
600	540291	94.50	600	540302	136.80		
800	540292	168.00	800	540303	234.00		
1000	540293	186.00	1000	540304	265.50		
1200	540294	234.00	1200	540305	312.00		
1500	540295	312.00	1500		-		
2000	540296	432.00	2000				

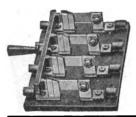
Fuseless Switches are furnished with Regular Jaws only. Fusible Switches are furnished with High Jaws only. Switches over 800 Ampere equipped with Spade Handles. For plain finish back connected 30 to 400 Ampere Switches deduct 10%, over 400 Ampere 5%.

For Quick Break Attachments see listing elsewhere. For Double Break Switches add 50%.

† 300 Ampere Fusible Switch not permitted by Code.

# HIGH GRADE KNIFE SWITCHES NATIONAL ELECTRICAL CODE STANDARD

## Four Pole—Single Throw—Mounted on Slate Base



FRONT CONNECTION— PLAIN FINISH

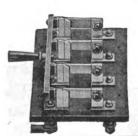
Switch Prices do not Include Fuses



	Without Fuse Connections 250 VOLTS D. C. AND A. C.			With Fuse Connections 250 VOLTS D. C. AND A. C.				
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List List No. Price				
30 60 100 200 300	540306 540307 540308 540309 540310	\$4.80 7.12 13.52 20.80 34.00	30 60 100 200 †300	540327 540328 540329 540330	\$7.04 10.40 20.00 30.80			
400 600 800 1000	540311 540312 540313 540314 540315	51.88 73.56 120.00 136.00 164.00	400 600 800 1000	540331 540332 540333 540334 540335	74 20 104.12 158.00 182.00 214.00			
1200 1500 2000	540315 540316 540317	246.00 328.00	1500 1500 2000	240333	214.00			

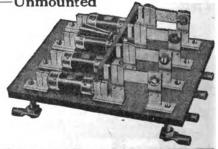
For polished finish 30 to 200 Ampere add 30%, over 200 Ampere 20%. For further notes see bottom of page.





BACK CONNECTION-POLISHED FINISH

Switch Prices do not Include Fuses



	Without Fuse Connections 250 VOLTS D. C. AND A. C.			With Fuse Connections 250 VOLTS D. C. AND A. C.				
Amperes	7	7.1	Amperes	HIGH	I JAWS			
Capacity of Switch	List No.	No. Price	Capacity of Switch	List No.	List Price			
30	540336	\$6.96	30	540357	\$8.96			
60	540337	10.80	60	540358	13.68			
100	540338	18.40	100	540359	25.60			
200	540339	28.40	200	540360	38.64			
300	540340	45.92	†300		the state of the s			
400	540341	65.44	400	540361	87.12			
600	540342	94.36	600	540362	126.40			
800	540343	156.00	800	540363	196.80			
1000	540344	170.00	1000	540364	222.40			
1200	540345	211.20	1200	540365	268.00			
1500	540346	280.00	1500		00000			
2000	540347	384.00	2000		DOME OF THE PARTY			

All Single Throw Switches furnished fused at handle end unless otherwise ordered. No extra charge for fuse connections at hinge-end. For plain finish back connected 30 to 400 Ampere Switches deduct

for fuse connections at ninge, end. For plain linish back connected 50 to 135 135 135 10%, over 400 Ampere 5%.

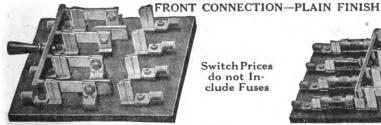
Fuseless Switches are furnished with Regular Jaws only Fusible Switches are furnished with High Jaws only. Switches over 800 Ampere equipped with Spade Handles.

For Quick Break Attachments see listing elsewhere. Double Break Switches add 50%.

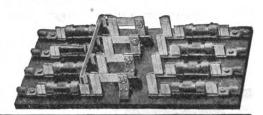
† 300 Ampere Fusible Switches not permitted by Code.

NATIONAL ELECTRICAL CODE STANDARD

#### Four Pole—Double Throw—Mounted on Slate Base



Switch Prices do not Include Fuses



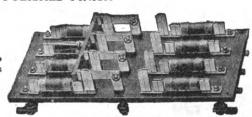
	Without Fuse Connections 250 VOLTS D. C. AND A. C.			With Fuse Connections 250 VOLTS D. C. AND A. C.			
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List Price		
30	540366	\$7.04	- 30	540378	\$13.60		
60	540367	10.40	60	540379	18.40		
100	540368	20,00	100	540380	37.20		
200	540369	32.00	200	540381	56.00		
300	540370	52.00	†300		18,013		
400	540371	75.20	400	540382	112.00		
600	540372	104.00	600	540383	166.00		
800	540373	168.00	800	540384	256.00		
1000	540374	190.00	1000	540385	304.00		
1200	540375	240.00	1200	540386	. 352.00		
1500	540376	376.00	1500		1		
2000	540377	480.00	2000				

For polished finish 30 to 200 Ampere add 30%, over 200 Ampere 20%. For further notes see bottom of page.

# Four Pole—Double Throw—Unmounted



Switch Prices do not Include Fuses



	Without Fuse Connections 250 VOLTS D. C. AND A. C.			With Fuse Connections 250 VOLTS D. C. AND A. C.			
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List Price		
30	540387	\$10.00	30	540399	\$19.20		
60	540388	14.80	60	540400	22.40		
100	540389	25.60	100	540401	40.00		
200	540390	40.80	200	540402	62.40		
300	540391	62.40	†300		100		
400	540392	90.00	400	540403	134.00		
600	540393	126.00	600	540404	182.40		
800	540394	224.00	800	540405	312.00		
1000	540395	248.00	1000	540406	354.00		
1200	540396	312.00	1200	540407	416.00		
1500	540397	416.00	1500		137.137		
2000	540398	576.00	2000				

Fuseless Switches are furnished with Regular Jaws only. Fusible Switches are furnished with High Jaws only. Switches over 800 Ampere equipped with Spade Handles. For plain finish back connected 30 to 400 Ampere Switches deduct 10%, over 400 Ampere 5%.

For Quick Break Attachments see listing elsewhere.

† 300 Ampere Fusible Switch not permitted by Code.

NATIONAL ELECTRICAL CODE STANDARD

#### 600 Volts

# Single Pole-Single Throw-Mounted on Slate Base

#### FRONT CONNECTION—PLAIN FINISH



Switch Prices do not Include Fuses

600 VOLTS

WITH	WITHOUT FUSE CONNECTION				WITH FUSE CONNECTION				
WITH QUI	WITH QUICK BREAK WITHOUT QUICK BREAK		Amperes Capacity	WITH QUICK BREAK		WITHOUT QU	WITHOUT QUICE BREAD		
List No.	List Price	List No.	List Price of Switch	List No.	List Price	List No.	List Price		
540408 540409 540410 540411 540412	\$3.00 3.20 5.52 8.80 13.64	540415 540416 540417	\$2.36 2.56 4.40	30 60 100 200 †300	540418 540419 540420 540421	\$4.32 4.68 7.80 12.32	540424 540425 540426	\$3.68 4.08 6.96	
540413 540414	18.72 24.76			400 600	540422 540423	25.84 34.68		,	

For polished finish, 30 to 200 Ampere, add 30%; over 200 Ampere, 20%. For further notes see bottom of page.

# Single Pole—Single Throw—Unmounted

**BACK CONNECTION—POLISHED FINISH** 



Switch Prices do not Include Fuses



600 VOLTS

WITH	OUT FUS	SE CONNEC	TION		WIT	TH FUSE	CONNECT	ION
WITH QUI	WITH QUICK BREAK WITHOUT QUICK BREAK		Amperes Capacity	WITH QUICK BREAK		WITHOUT QUICK BREAK		
List No.	List Price	List No.	List Price	of Switch	List No.	List Price	List No.	List Price
540427 540428 540429 540430 540431	\$4.20 4.40 7.16 10.56 14.32	540434 540435 540436	\$3.68 3.88 6.08	30 60 100 200 †300	540437 540438 540439 540440	\$5.32 5.92 9.36 13.88	540443 540444 540445	\$4.68 5.20 8.16
540432 540433	22.00 30.80			400 600	540441 540442	29.16 40.16		0007

All Single Throw Switches furnished fused at handle end unless otherwise ordered. No extra charge for fuse connections at hinge end.

Fuseless Switches are furnished with Regular Jaws only. Fusible Switches are furnished with High Jaws only.

† 300 Ampere Fusible Switch not permitted by Code.

For Double Break Switches add 50%. For plain finish, back connected, 30 to 400 Ampere Switches deduct 10%, over 400 Ampere 5%.

### Western Electric

#### HIGH GRADE KNIFE SWITCHES

NATIONAL ELECTRICAL CODE STANDARD

#### 600 Volts

## Single Pole—Double Throw—Mounted on Slate Base

FRONT CONNECTION—PLAIN FINISH



Switch Prices do not Include Fuses



600 VOLTS

WITH	OUT FUS	E CONNEC	TION		WIT	TH FUSE	CONNECTI	ON
WITH QUIC	WITH QUICK BREAK WITHOUT QUICK BREAK		Amperes Capacity	WITH QUICK BREAK		WITHOUT QUICK BREAK		
List No.	List Price	List No.	List Price of Switch	List No.	List Pr:ce	List No.	List Price	
540446 540447 540448 540449 540450 540451 540452	\$5.28 5.52 8.16 13.20 19.80 27.52 35.20	540453 540454 540455	\$4.72 4.96 7.16	30 60 100 200 †300 400 600	540456 540457 540458 540459 540460 540461	\$7.48 8.16 13.76 20.92 39.60 59.40	540462 540463 540464	\$6.24 7.16 12.68

For polished finish, 30 to 200 ampere, add 30%; above 200 ampere, 20%. For further notes see bottom of page.

# Single Pole—Double Throw—Unmounted

#### **BACK CONNECTION—POLISHED FINISH**



Switch Prices do not Include Fuses

600 VOLTS



WITHOUT FUSE CONNECTION WITH FUSE CONNECTION Amperes V.ITH QUICK BREAK WITHOUT QUICK BREAK WITH QUICK BREAK WITHOUT QUICK BREAK Capacity of Switch List List List List List List List List No. Price No. Price No. Price No. Price 540465 \$6.44 540472 \$5.40 30 540475 \$7.48 540481 \$6.36 6.60 540466 7.16 540473 5.60 60 540476 8.28 540482 540467 9.92 540474 13.76 12.12 8.16 100 540477 540483 14.76540468 200 540478 20.3623.12 540469 †300 30.80 540470 40.72 400 540479 41.80 540471 600 540480 57.20

Fuseless Switches are furnished with Regular Jaws only. Fusible Switches are furnished with High Jaws only.

† 300 Ampere Fusible Switch not permitted by Code.

For Double Break Switches add 50%. For plain finish, back connected, 30 to 400 Ampere Switches deduct 10%, over 400 Ampere 5%.

NATIONAL ELECTRICAL CODE STANDARD

#### 600 Volts

# Double Pole—Single Throw—Mounted on Slate Base FRONT CONNECTION—PLAIN FINISH



Switch Prices do not Include Fuses

600 VOLTS



WITH	WITHOUT FUSE CONNECTION				WITH FUSE CONNECTION				
WITH QUICK BREAK WITHOUT QUICK BREAK		Amperes Capacity	WITH QUICK BREAK		WITHOUT QUICK BREAK				
List No.	List Price	List No.	List Price	of Switch	List No.	List Price	List No.	List Price	
540484 540485 540486 540487	\$5.40 5.80 10.00 16.00	540491 540492 540493	\$4.24 4.60 8.00	30 60 100 200	540494 540495 540496 540497	\$7.84 8.52 14.20 22.40	540500 540501 540502	\$6.64 7.40 12.60	
540488 540489 540490	24.80 34.00 45.00			†300 400 600	540498 540499	47.00 63.00	14 11 -	2	

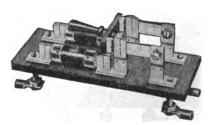
For polished finish, 30 to 200 ampere, add 30%; over 200 ampere, 20%. For further notes see bottom of page.

# Double Pole—Single Throw—Unmounted **BACK CONNECTION—POLISHED FINISH**



Switch Prices do not Include Fuses

600 VOLTS



WITH	OUT FUS	SE CONNEC	TION		WITH FUSE CONNECTION				
WITH QUICK BREAK WITHOUT QUICK BREAK		Amperes Capacity	WITH QUICK BREAK		WITHOUT QUICK BREAK				
List No.	List Price	List No.	List Price	of Switch	List No.	List Price	List No.	List Price	
540503 540504 540505 540506 540507 540508	\$7.64 8.00 13.00 19.20 26.00 40.00	540510 540511 540512	\$6.64 7.00 11.00	30 60 100 200 †300 400	540513 540514 540515 540516	\$9.64 10.80 17.00 25.20	540519 540520 540521	\$8.44 9.40 14.80	
540509	56.00			600	540518	73.00	Vistin -	ADDIN'Y	

All Single Throw Switches furnished fused at handle end unless otherwise ordered. No extra charge for fuse connections at hinge end.

Fuseless Switches are furnished with Regular Jaws only. Fusible Switches are furnished with High

† 300 Ampere Fusible Switch not permitted by Code.

For Double Break Switches add 50%. For plain finish, back connected, 30, to 400 Ampere Switches deduct 10%, over 400 Ampere 5%.

NATIONAL ELECTRICAL CODE STANDARD

#### 600 Volts

## Double Pole—Double Throw—Mounted on Slate Base

FRONT CONNECTION—PLAIN FINISH



Switch Prices do not Include Fuses

600 VOLTS



WITH	OUT FUS	SE CONNEC	TION		WITH FUSE CONNECTION				
WITH QUICK BREAK WITHOUT QUICK BREAK		Amperes Capacity	WITH QUICK BREAK		WITHOUT QUICK BREAK				
List No.	List Price	List No.	List Price	of Switch	List No.	List Price	List No.	List Price	
540522 540523 540524 540525 540526	\$9.52 10.00 14.80 24.00 36.00	540529 540530 540531	\$8.52 9.00 13.00	30 60 100 200 †300	540532 540533 540534 540535	\$13.48 14.80 25.00 38.00	540538 540539 540540	\$10.84 12.00 23.00	
540527 540528	50.00 64.00		*	400 600	$540536 \\ 540537$	72.00 108.00		of the	

For polished finish, 30 to 200 Ampere, add 30 %; over 200 Ampere, 20 %. For further notes see bottom of page.

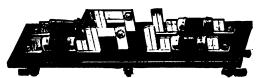
#### Double Pole—Double Throw—Unmounted

**BACK CONNECTION—POLISHED FINISH** 



Switch Prices do not Include Fuses

600 VOLTS



WITH	HOUT FUS	SE CONNEC	CTION	-	WI	TH FUSE	CONNECT	ION
WITH QUI	ICK PREAK	WITHOUT Q	UICK BREAK	Amperes Capacity	WITH QUI	CK BREAK	WITHOUT Q	UICK BREAK
List No.	List Price	List No.	List Price	of Switch	List No.	List Price	List No.	List Price
540541 540542 540543 540544 540545 540546 540547	\$11.48 12.00 18.00 26.80 42.00 56.00 76.00	540548 540549 540550	\$9.72 10.20 14.80	30 60 100 200 †300 400 600	540551 540552 540553 540554 540555 540556	\$13.76 15.00 25.00 37.00 74.00 104.00	540557 540558 540559	\$11.52 13.00 22.00

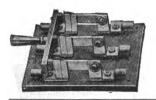
Fuseless Switches are furnished with Regular Jaws only. Fusible Switches are furnished with High Jaws only.

† 300 Ampere Fusible Switch not permitted by Code.
For Double Break Switches add 50%. For plain finish, back connected, 30 to 400 Ampere Switches deduct 10%, over 400 Ampere 5%.

NATIONAL ELECTRICAL CODE STANDARD

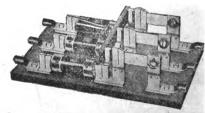
#### 600 Volts

# Three Pole-Single Throw-Mounted on Slate Base FRONT CONNECTION—PLAIN FINISH



Switch Prices do not Include Fuses

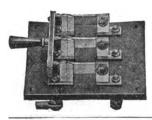
600 VOLTS



WITH	OUT FUS	SE CONNEC	TION		WI	TH FUSE	CONNECT	ION
WITH QUIC	K BREAK	WITHOUT Q	UICK BREAK	Capacity	WITH QUI	CK BREAK	WITHOUT Q	UICK BREAK
List No.	List Price	List No.	List Price	of Switch	List No.	List Price	List No.	List Price
540560 540561 540562 540563 540564 540565 540566	\$8.76 9.28 16.00 25.20 39.68 54.40 72.00	540567 540568 540569	\$6.80 7.36 12.80	30 60 100 200 †300 400 600	540570 540571 540572 540573 540574 540575	\$12.60 13.64 22.72 35.84 75.20 100.80	540576 540577 540578	\$10.68 11.84 20.16

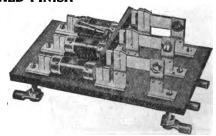
For polished finish, 30 to 200 Ampere, add 30%; over 200 Ampere, 20%. For further notes see bottom of page.

# Three Pole—Single Throw—Unmounted BACK CONNECTION—POLISHED FINISH



Switch Prices do not Include Fuses

600 VOLTS



WITH	HOUT FUS	SE CONNEC	CTION		WI	TH FUSE	CONNECT	ION
WITH QU	ICK BREAK	WITHOUT Q	UICK BREAK	Capacity	WITH QUI	CK BREAK	WITHOUT Q	UICK BREAK
List No.	List Price	List No.	List Price	of Switch	List No.	List Price	List No.	List Price
540579 540580 540581 540582 540583 540584	\$12.24 12.80 20.80 30.72 41.60 64.00	540586 540587 540588	\$10.68 11.20 17.60	30 60 100 200 †300 400	540589 540590 540591 540592	\$15.48 17.28 27.20 40.32	540595 540596 540597	\$13.56 15.04 23.68
					540593 540594	84.80 116.80	1.0	100

All Single Throw Switches furnished fused at handle end unless otherwise ordered. No extra charge for fuse connections at hinge end.

Fuseless Switches are furnished with Regular Jaws only. Fusible Switches are furnished with High

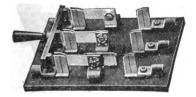
† 300 Ampere Fusible Switch not permitted by Code.

For Double Break Switches add 50%. For plain finish, back connected, 30 to 400 Ampere Switches deduct 10%, over 400 Ampere 5%.

NATIONAL ELECTRICAL CODE STANDARD

#### 600 Volts

# Three Pole—Double Throw—Mounted on Slate Base FRONT CONNECTION—PLAIN FINISH



Switch Prices do not Include Fuses

600 VOLTS



WITH	HOUT FUS	SE CONNEC	CTION		WI	TH FUSE	CONNECT	ION
WITH QUI	CK BREAK	WITHOUT Q	UICK BREAK	Capacity	WITH QUI	CK BREAK	WITHOUT Q	UICK BREAK
List No.	List Price	List No.	List Price	of Switch	List No.	List Price	List No.	List Price
540598 540599 540600 540601 540602	\$15.28 16.00 23.68 38.40 57.60	540605 540606 540607	\$13.68 14.40 20.80	30 60 100 200 †300	540608 540609 540610 540611	\$21.68 15.68 40.00 60.80	540614 540615 540616	\$18.80 20.80 36.80
540603 540604	80.00 102.40			400 600	540612 540613	115.20 172.80		1

For polished finish, 30 to 200 Ampere, add 30%; over 200 Ampere, 20%. For further notes see bottom of page.

# Three Pole—Double Throw—Unmounted

BACK CONNECTION—POLISHED FINISH



Switch Prices do not Include Fuses

600 VOLTS



WITH	IOUT FUS	E CONNEC	CTION		W	ITH FUSI	E CONNECT	TION
WITH QUI	ICK BREAK	WITHOUT Q	UICK BREAK	Capacity	WITH QUI	CK BREAK	WITHOUT Q	UICK BREAK
List No.	List Price	List No.	List Price	of Switch	List No.	List Price	List No.	List Price
540617 540618 540619 540620 540621	\$18.48 19.20 28.80 42.88 67.20	540624 540625 540626	\$15.60 16.32 23.48	30 60 100 200 †300	540627 540628 540629 540630	\$21.68 24.00 40.00 59.20	540633 540634 540635	\$18.48 20.80 35.20
540622 540623	89.60 121.60	100		400 600	540631 540632	118.40 166.40	The second	of building

Fuseless Switches are furnished with Regular Jaws only. Fusible Switches are furnished with High Jaws only.

† 300 Ampere Fusible Switch not permitted by Code.

For Double Break Switches add 50%. For plain finish, back connected, 30 to 400 Ampere Switches deduct 10%, over 400 Ampere 5%.

NATIONAL ELECTRICAL CODE STANDARD

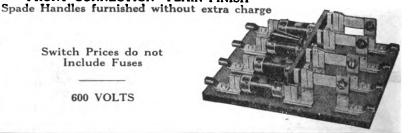
### 600 Volts

Four Pole-Single Throw-Mounted on Slate Base FRONT CONNECTION—PLAIN FINISH



Switch Prices do not Include Fuses

600 VOLTS

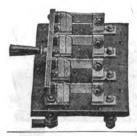


WITI	HOUT FUS	SE CONNEC	CTION		WI	TH FUSE	CONNECT	ION
WITH QU	ICK BREAK	WITHOUT Q	UICK BREAK	Amperes Capacity	WITH QUI	CK BREAK	WITHOUT Q	UICK BREAK
List No.	List Price	List No.	List Price	of Switch	List No.	List Price	List No.	List Price
540636 540637 540638 540639 540640	/ \$12.04 12.76 22.00 35.20 54.56	540643 540644 540645	\$9.40 10.12 17.60	30 60 100 200 †300	540646 540647 540648 540649	\$17.32 18.76 31.24 49.28	540652 540653 540654	\$14.68 16.28 27.72
540641 540642	74.80 99.00			400 600	540650 540651	103.40 138.60		130000

For polished finish 30 to 200 Ampere add 30%, over 200 Ampere 20%. For further notes see bottom of page.

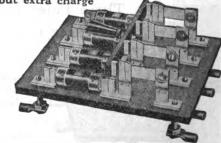
Four Pole—Single Throw—Unmounted





Switch Prices do not Include Fuses

600 VOLTS



WITH	HOUT FUS	SE CONNEC	CTION		WI	TH FUSE	CONNECTI	ON
WITH QUI	CK BREAK	WITHOUT Q	UICK BREAK	Amperes Capacity	WITH QUI	CK BREAK	WITHOUT Q	UICK BREAK
List No.	List Price	List No.	List Price	of Switch	List No.	List Price	List No.	List Price
540655 540656 540657 540658 540559	\$16.88 17.60 28.60 42.24 57.20	540662 540663 540664	\$14.68 15.40 24.20	30 60 100 200 †300	540665 540666 540667 540668	\$21.28 23.76 37.40 55.44	540671 540672 540673	\$18.64 20.68 32.56
540660 540661	88.00 123.20			400 600	540669 540670	116.60 160.60	08.50	- Vistoria

All Single Throw Switches furnished fused at handle end unless otherwise ordered. No extra charge for fuse connections at hinge end.

Fuseless Switches are furnished with Regular Jaws only. Fusible Switches are furnished with High Jaws only.

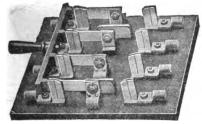
† 300 Ampere Fusible Switch not permitted by Code.
For Double Break Switches add 50%.
For plain finish back connected 30 to 400 Ampere Switches deduct 10%, over 400 Ampere 5%. Digitized by GOOSTE

NATIONAL ELECTRICAL CODE STANDARD

#### 600 Volts

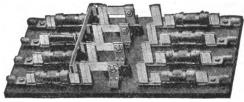
## Four Pole—Double Throw—Mounted on Slate Base FRONT CONNECTION—PLAIN FINISH

Spade Handles furnished without extra charge



Switch Prices do not Include Fuses

600 VOLTS



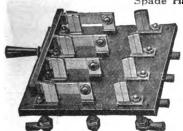
WITH	OUT FUS	E CONNEC	CTION		WI	TH FUSE	CONNECT	ION
WITH QUI	CK BREAK	WITHOUT Q	UICK BREAK	Cabaire	WITH QUI	CK BREAK	WITHOUT Q	UICK BREAK
List No.	List Price	List No.	List Price	of Switch	List No.	List Price	List No.	List Price
540674 540675 540676 540677	\$21.04 22.00 32.56 52.80	540681 540682 540683	\$18.84 19.80 28.60	30 60 100 200	540684 540685 540686 540687	\$29.84 32.56 55.00 83.60	540690 540691 540692	\$25.00 27.00 50.60
540678 540679 540680	79.20 110.00 140.80			†300 400 600	540688 540689	158.40 237.60		

For polished finish 30 to 400 Ampere add 30%, over 200 Ampere 20%. For further notes see bottom of page.

# Four Pole—Double Throw—Unmounted

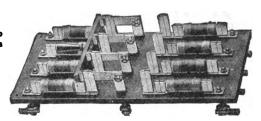
BACK CONNECTION—POLISHED FINISH

Spade Handles furnished without extra charge



Switch Prices do not Include Fuses

600 VOLTS



WITH	OUT FUS	E CONNEC	CTION		V	/ITH FUS	E CONNEC	TION
WITH QUI	CK BREAK	without 3	UICK BREAK	Capacity	WITH QUI	CK BREAK	WITHOUT Q	UICK BREAK
List No.	List Price	List No.	List Price	of Switch	List No.	List Price	List No.	List Price
540693 540694 540695 540696 540697 540698 540699	\$25.44 26.40 39.60 58.96 92.40 123.20 167.20	540700 540701 540702	\$21.48 22.44 32.56	30 60 100 200 †300 400	540703 540704 540705 540706 540707 540708	\$29.84 33.00 55.00 81.40 162.80 228.80	540709 540710 540711	\$25.44 28.60 48.40

Fuseless Switches are furnished with Regular Jaws only. Fusible Switches are furnished with High

Jaws only.

† 300' Ampere Fusible Switch not permitted by Code.

For Double Break Switches add 50%. For plain finish, back connected 30 to 400 Ampere Switches deduct 10%, over 400 Ampere 5%.

NATIONAL ELECTRICAL CODE STANDARD

500 VOLTS A. C. FUSED AND UNFUSED-FRONT CONNECTED-PLAIN FINISH

# Three Pole—Single Throw



Switch Prices do not Include Fuses

500 VOLTS A. C.

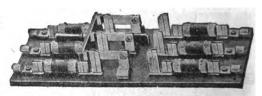
WITHOU	T FUSE CONN	NECTION	WITH FUSE CONNECTION				
Amperes	List	List	Amperes	HIGH JAWS			
Capacity of Switch	No.	Price	Capacity of Switch	List No.	List Price		
30	540748	\$4.96	30	540769	\$8.00		
60	540749	5.36	60	540770	9.20		
100	540750	10.16	100	540771	16.40		
200	540751	15.60	200	540772	26.20		
300	540752	24.00	†300	0.00	1 7 7 7 7 7		
400	540753	36.60	400	540773	57.00		
600	540754	51.92	600	540774	80.00		
800	540755	90.00	800	540775	124.00		
1000	540756	102.00	1000	540776	140.00		
1200	540757	123.00	1200	540777	168.00		
1500	540758	185.00			L- ASSE		
2000	540759	246.00			111 2 E 0540		

#### Three Pole—Double Throw



Switch Prices do not Include Fuses

500 VOLTS A. C.



WITHOU	T FUSE CONN	ECTION	WITH	FUSE CONNEC	TION
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List Price
30	540778	\$6.80	30	540790	\$15.00
60	540779	7.80	60	540791	18.00
100	540780	15.00	100	540792	32.00
200	540781	24.00	200	540793	47.00
300	540782	39.00	†300		
400	540783	56.40	400	540794	96.00
600	540784	78.00	600	540795	144.00
800	540785	126.00	800	540796	220.00
1000	540786	142.50	1000	540797	240.00
1200	540787	180.00	1200	540798	280.00
1500	540788	282.00	1500	7.7.00	71 - 4 - 449017
2000	540789	360.00	2000	0.6	

All Single Throw Switches furnished fused at handle end unless otherwise ordered. No extra charge for fuse connections at hinge end.

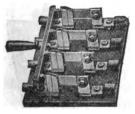
Single and Double Throw Fuseless Switches are furnished with Regular Jaws only. Single Throw Fused Switches are furnished with High Jaws only. Switches over 800 Ampere equipped with Spade Handles.

For polished finish 30 to 200 Ampere add 30%, over 200 Ampere 20%. For Double Break Switches add 50%.

† 300 Ampere Fusible Switch not permitted by Code.

NATIONAL ELECTRICAL CODE STANDARD

500 VOLTS A. C. FUSED AND UNFUSED—FRONT CONNECTED—PLAIN FINISH Four Pole—Single Throw



Switch Prices do not Include Fuses

500 VOLTS A. C.

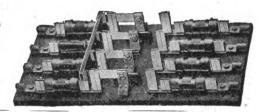
WITHOU	T FUSE CONN	IECTION	with i	FUSE CONNEC	TION
Amperes	List	List	Amperes	res HIGH JAWS	
Capacity of Switch	No.	Price	Capacity of Switch	List No.	List Price
30	540799	\$6.60	30	540820	\$10.68
60	540800	7.12	60	540821	12.28
100	540801	13.52	l 100 i	540822	21.88
200	540802	20.80	200	540823	34.96
300	540803	34.00	†300		
400	540804	51.88	400	540824	76.00
600	540805	73.52	600	540825	106.68
800	540806	120.00	800	540826	165.36
1000	540807	136.00	1000	540827	186.68
1200	540808	164.00	1200	540828	224.00
1500	540809	246.00	1500	0.000	
2000	540810	328.00	2000		

#### Four Pole—Double Throw



Switch Prices do not Include Fuses

500 VOLTS A. C.



WITHOUT FUSE CONNECTION			WITH	FUSE CONNEC	TION
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List Price
30	540829	\$9.20	30	540841	\$20.00
60	540830	10.40	60	540842	24.00
100	540831	20.00	100	540843	42.64
200	540832	32.00	200	540844	62.64
300	540833	52.00	†300		
400	540834	75.20	400	540845	120'.00
600	540835	104.00	600	540846	192.00
800	540836	168.00	800	540847	293.32
1000	540837	190.00	1000	540848	320.00
1200	540838	240.00	1200	540849	373.32
1500	540839	376.00	1500		
2000	540840	480.00	2000	e	

All Single Throw Switches furnished fused at handle end unless otherwise ordered. No extra charge for fuse connections at hinge end.

Single and Double Throw Fuseless Switches are furnished with Regular Jaws only. Single Throw Fused Switches are furnished with High Jaws only. Switches over 800 Ampere equipped with Spade Handles.

For polished finish 30 to 200 Ampere add 30%, over 200 Ampere 20%. For Double Break Switches add 50%.

† 300 Ampere Fusible Switch not permitted by Code. Digitized by GOOGIC

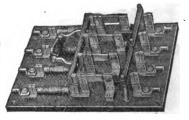
#### MOTOR STARTING SWITCHES

NATIONAL ELECTRICAL CODE STANDARD

### FOR ALTERNATING CURRENT MOTORS PLAIN FINISH-FRONT CONNECTION-MOUNTED ON OILED SLATE BASES







### Double Pole—Double Throw HIGH GRADE

250 VOLTS			500 VOLTS		
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List Price
30 60 100	540712 540713 540714	\$7.42 9.90 18.90	30 60 100	540715 540716 540717	\$9.45 11.70 20.94
,		PUNCH	ED CLIP		
30 60 100	540718 540719 540720	\$6.75 8.55 17.82	30 60 100	540721 540722 540723	\$8.10 10.08 19.62

## Three Pole—Double Throw HIGH GRADE

250 VOLTS				500 VOLTS		
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List Price	
30 60 100	540724 540725 540726	\$9.90 13.14 25.20	30 60 100	540727 540728 540729	\$12.60 15.48 27.90	
		PUNCHI	ED CLIP			
30 60 100	540730 540731 540732	\$9.00 11.34 23.76	30 60 100	540733 540734 540735	\$10.80 13.50 27.90	

### Four Pole—Double Throw HIGH GRADE

250 VOLTS				500 VOLTS	
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List Price
30 60 100	540736 540737 540738	\$13.14 17.55 33.58	30 60 100	540739 540740 540741	\$16.74 20.70 37.26
		PUNCHI	ED CLIP		
30 60 100	540742 540743 540744	\$12.02 15.12 31.68	30 60 100	540745 540746 540747	\$14.40 18.00 34.74

100 31.68 540744 Switch prices do not include Fuses. Prices include Spade Handle. tized by

#### Western Electric

### PUNCHED CLIP KNIFE SWITCHES

NATIONAL ELECTRICAL CODE STANDARD

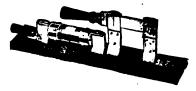
250 AND 600 VOLTS—FRONT CONNECTION
PLAIN FINISH—MOUNTED ON OILED SLATE BASE

Single Pole—Single Throw



Switch Prices do not Include Fuses

250 Volts



WITHOU	T FUSE CON	NECTION	WIT	H FUSE CONN	ECTION	
Amnoros	1		Amneres	HIGH JAWS		
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List . Price	
30 60 100 200	540890 540891 540892 540893	\$0.76 1.33 2.70 4.86	30 60 100 200	540898 540899 540900 540901	\$1.26 2.12 4.28 7.92	

# 600 Volts With Quick Break Blades

30	540902	\$1.95	30	540910	\$3.06
60	540903	2.16	60	540911	3.52
100	540904	3.89	100	540912	6.48
200	540905	7.56	200	540913	11.70

#### Without Quick Break Blades

30	540914	<b>\$</b> 1.44	30	540920	<b>\$</b> 2.52
	540915	1 79	60	540921	3.06
60		1.73			
100	540916	3.42	100	540922	5.85

# Single Pole—Double Throw



Switch Prices do not Include Fuses

250 Volts



WITHOU	WITHOUT FUSE CONNECTION			WITH FUSE CONNECTION		
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List Price	
30 60 100 200	540923 540924 540925 540926	\$1.37 2.34 5.29 8.78	30 60 100 200	540927 540928 540929 540930	\$2.77 4.28 9.32 17.64	

#### 600 Volts

#### Without Quick Break Blades

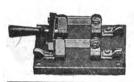
30	540931	\$2.98	30	540934 \$5.94
60	540932	3.42	60	540935 6.75
100	540933	7.02	100	Digitize <b>540936</b> O D Q <b>13.50</b>

NATIONAL ELECTRICAL CODE STANDARD

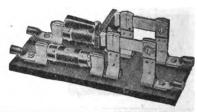
250 AND 600 VOLTS—FRONT CONNECTION

PLAIN FINISH-MOUNTED ON OILED SLATE BASE

Double Pole-Single Throw



Switch Prices do not Include Fuses



250 Volts

	WITHOU'	T FUSE CONN	NECTION	WITH	FUSE CONNEC	CTION
	Amperes	***	***	Ammana	HIGH JAWS	
. (	Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List Price
	30 60 100 200	540937 540938 540939 540940	\$1.22 2.20 4.50 8.10	30 60 100 200	540945 540946 540947 540948	\$1.91 3.24 6.58 12.17

# 600 Volts

## With Quick Break Blades

30	540949	\$3.24	30	540957	\$4.68
60	540950	3.60	60	540958	5.40
100	540951	6.48	100	540959	9.90
200	540952	12.60	200	540960	18.00
	·	Without Quick	Break Blades	<del>-\</del>	

30	540961	<b>\$</b> 2.41	30	540967	\$3.96
60	540962	2.88	60	540968	4.68
100	540963	5.69	100	540969	9.00
	1 010000	0.00	100	1 940909 1	9.00

# Double Pole—Double Throw



Switch Prices do not Include Fuses

250 Volts



WITHOU	T FUSE CONN	ECTION	WITI	H FUSE CONN	ECTION
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List Price
30 60 100 200	540970 540971 540972 540973	\$2.09 3.60 8.10 13.50	30 60 100 200	540974 540975 540976 540977	\$3.96 6.12 13.68 23.40

## 600 Volts

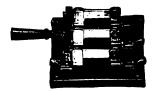
#### Without Quick Break Blades

30	540978	<b>\$</b> 3.96	30	540981	\$7.92
60	540979	4.68	60	540982	9.00
100	540980	9.36	. 100 Digit	zed h. <b>540983</b>	C 18.00
			Land Digit	Ized byogopoo C ZII	10.00

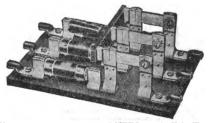
NATIONAL ELECTRICAL CODE STANDARD

250 AND 600 VOLTS—FRONT CONNECTION PLAIN FINISH—MOUNTED ON OILED SLATE BASE

Three Pole—Single Throw



Switch Prices do not Include Fuses



250 Volts

WITHOU	WITHOUT FUSE CONNECTION			FUSE CONNE	CTION
A		7:4	A	HIGH JAWS	
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List Price
30 60 100	540984 540985 540986	\$1.84 3.31 8.77	30 60 100	540992 540993 540994	\$2.88 4.86 9.90
200	540987	12.17	200	540995	18.25

## 600 Volts

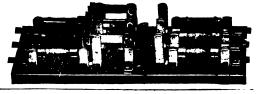
#### With Quick Break Blades

30	540996	\$5.04	30	541004	\$7.49
60	540997	5.58	60	541005	8.64
100	540998	10.08	100	541006	15.84
200	540999	19.55	200	541007	28.80
		Without Quick	Break Blades		•
30	541008	\$3.78	30	541014	\$6.30
60	541009	4.50	60	541015	7.49
100	541010	8.82	100	541016	14.40

# Three Pole—Double Throw



Switch Prices do not Include Fuses



250 Volts

JOHTIW	JT FUSE CONN	ECTION	WITI	H FUSE CONNE	ECTION
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List Price
30 60 100 200	541017 541018 541019 541020	\$3.24 5.58 12.42 20.88	30 60 100 200	541021 541022 541023 541024	\$6.34 9.79 21.31 37.44

### 600 Volts

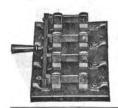
#### Without Ouick Break Blades

		Without &=10.				
30	541025	\$6.66	30	541028	\$13.07	_
60	541026	7.74	60	541029	<b>14.85</b> ■	
100	541027	15.48	100	Digitize <b>541030</b> (	Q 29.70	

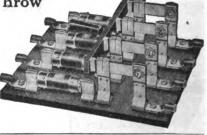
NATIONAL ELECTRICAL CODE STANDARD

250 AND 600 VOLTS—FRONT CONNECTION PLAIN FINISH—MOUNTED ON OILED SLATE BASE

Four Pole-Single Throw



Switch Prices do not Include Fuses



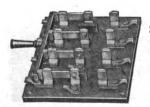
250 Volts

WITHOUT FUSE CONNECTION		WITH FUSE CONNECTION			
Amperes		Amperes	HIGH	JAWS	
Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List Price
30 60	541031 541032	\$2.45 4.39	30	541039 541040	\$3.82 6.48
100 200	541033 541034	9.00 16.20	100 200	541041 541042	$13.14 \\ 24.30$

# 600 Volts With Quick Break Blades

30	541043	\$6.84	30	541051	\$10.26
60	541044	7.56	60	541052	11.88
100	541045	13.50	100	541053	21.60
200	541046	26.46	200	541054	39.60
		Without Quick	Break Blades		
30	541055	\$5.04	30	541061	\$8.71
60	541056	5.94	60	541062	10.26
100	541057	11.88	100	541063	19.80

# Four Pole-Double Throw



Switch Prices do not Include Fuses

250 Volts



WITHOUT FUSE CONNECTION			WITH FUSE CONNECTION		
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List Price
30 60 100 200	541064 541065 541066 541067	\$5.12 8.80 17.64 27.90	30 60 100 200	541068 541069 541070 541071	\$8.71 13.46 29.38 47.88

#### 600 Volts

#### Without Quick Break Blades

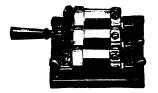
30	541072	\$9.00	30	541075	\$18.00
60	541073	10.80	60	541076	20.70
100	541074	21.60	<b>100</b> Digi	ized by <b>541077</b> 🔾	41.40

NATIONAL ELECTRICAL CODE STANDARD

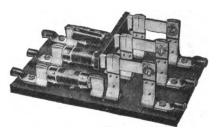
#### 500 VOLTS A. C. FUSED AND UNFUSED—FRONT CONNECTED—PLAIN FINISH

## Three Pole

500 VOLTS A. C.



Switch Prices do not Include Fuses



#### SINGLE THROW

WITHOU	T FUSE CONN	ECTION	WITH	FUSE CONNEC	CTION
	•	A	HIGH JAWS		
Amperes Capacity of Switch	List No.	List Price	Amperes Capacity of Switch	List No.	List Price
30 60 100 200	540850 540851 540852 540853	\$2.88 3.60 6.76 12.17	30 60 100 200	540858 540859 540860 540861	\$5.04 6.30 12.60 21.96

#### **DOUBLE THROW**

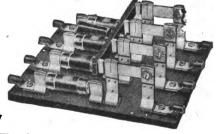
30     540862     \$4.79       60     540863     5.58       100     540864     12.42       200     540865     20.88	30	540866	\$10.80
	60	540867	13.32
	100	540868	25.20
	200	540869	38.70

### Four Pole '

500 VOLTS A. C.



Switch Prices do not Include Fuses



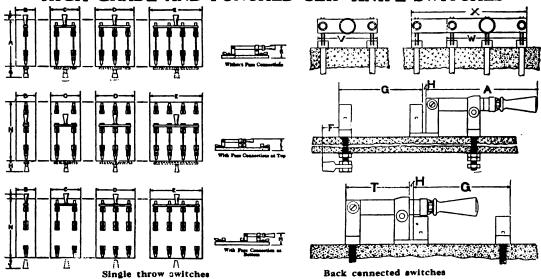
#### SINGLE THROW

WITHOU	T FUSE CON	NECTION	WITH	FUSE CONNE	CTION
Amperes			Amperes	нідн	JAWS
Capacity	List	List	Capacity	List	List
of Switch	No	Price	of Switch	No.	Price
30	540870	\$3.85	30	540878	\$6.66
60	540871	4.39	60	540879	8.64
100	540872	9.00	100	540880	16.74
200	540873	16.20	200	540881	29.16

#### **DOUBLE THROW**

30	540882	\$6.91	30	540886	\$14.40
60	540883	7.92	60	540887	17.64
100	540884	17.64	100	540888	33.48
200	540885	27.90	200	540889	51.48

# HIGH GRADE AND PUNCHED CLIP KNIFE SWITCHES



# Knife Switches OVERALL DIMENSIONS

			30 to	600 A	mp. 250	Volts,	Unfuse	d			H	igh Gr	sde		Punc	hed Cli	р
Amp.	A	В	C	D	$\mathbf{E}$	F	G				K			K			
30	41/2	2	314	6	81/2	11/4	3 1		· · •	• • •	314	• • •		3 🕏	• • •	• · ·	
60	7	3	5.,	8	11	118	31/8			• • •	2 17			2 18			
100	814	334	$5\frac{1}{2}$	.9.	12	138	4.0	• • •	• • •	. • • •	3.14		• • •	3 11			
200	11	1	612	101/2	141/2	11/2	4 (4 6 (3	• • •		• • •	2 13	• • •	• • • •	, 14		• • •	
400 600	14 17	5	714	12 <sup>1</sup> 2	17 19	1 +1	654	• • •	• • •	• · ·	687		• • •				
600	17	ъ	9						• • •	• • •			٠	• • • •	Duna	hed Cli	_
	,		30		A ութ. 2	50 Vol	ts, Fus		T	T	к	igh Gr	M	К	L	M	N N
Amp.		В	C	D	1. 01.			338	1 14	114	917	214	214	27	214	214	616
<b>3</b> 0 60		2	312	6 8	81/2 11	• • •	• • •	38	1 14	1	511	211	2 1	$\tilde{2}^{16}_{16}$	3 L	313	1012
100	• · • •	314	51/2	9	12		• • •	4.5	134	• 2	3 1	3 1	3 1	3 1	3 1	3 🛧	1412
200	• • • •	473	615	1014	1416			5 1	158	•	4 4	4 16	4 1	3 ∰ ⋅	458	45/8	18
400	• · · ·	5	814	13	18			6 %	178	•	654	614	614				23
600		6	10	15	20			6 %	$^{2}$ $^{\circ}$	•	634	73%	68.				28
																•	
•	'Handle	does 1	ot exter	nd beyo	nd slate	base.										-	
•	Handle						C., Ur	ifused-			н	igh Gr	ade	-	Punc	hed Cli	p
			otexter -30 to 6 C			olts. A. F	C., Ur	nfused-			к	igh Gr	ade	K	Punc	hed Cli	p
Amp.	. A	B		300 Amp D 8	500 V E 11		G 4½	ifused-			H K 2 <del>   </del>	igh Gr	ade 	K 2 ∯	Punc	hed Cli	<b>p</b>
Amp. 30 60	A 634 7	В 3 3	-30 to 6 C 5 5	300 Amp D 8 8	500 V E 11 11	olts. A. F 138 118	G				K 2 H 2 H	_		K 2 & 2 &		hed Cli	<b>P</b>
Amp. 30 60 100	. A	B	-30 to 6 C 5 5 51/2	300 Amr D 8 8 9	500 V E 11 11 12	olts. A. F $1\frac{3}{8}$ $1\frac{1}{8}$ $1\frac{3}{8}$	G 41/8 37/8 4 14				H K 2 11 2 11 3 14	• • • •		K 2 16 2 16 3 14		hed Cli	р  
Amp. 30 60 100 200	A 61/2 7 81/2 11	В 3 3	-30 to 6 C 5 5 5 5 <sup>1</sup> / <sub>2</sub> 6 <sup>1</sup> / <sub>2</sub>	300 Amr D 8 8 9 10 <sup>1</sup> / <sub>2</sub>	500 V E 11 11 12 1412	olts. A. F 138 118 138 112	G 4½				K 2 H 2 H			K 2 1 2 1 3 1 3 1		hed Cli	
Amp. 30 60 100 200 400	A 61/2 7 81/2 11	B 3 3,1,2 4 5	-30 to 6 C 5 5 51/2	000 Amr D 8 8 9 1014 1212	500 V E 11 11 12 1412 17	olts. A. F 138 118 138 112 178	G 41/8 37/8 4 14 4 14 6 14				K 2 H 2 H			3 🚻	• • •	hed Cli	
Amp. 30 60 100 200	A 61/2 7 81/2 11	В 3 3	-30 to 6 C 5 5 5 5 5 6 1 2 7 1 2	000 Amr D 8 8 9 1014 1212 14	5. 500 V E 11 11 12 14 17 19	olts. A. F F 138 118 138 112 178 1 H	G 41.8 37.8 4 14 6 14 6 14			• • •	K 211 211 3 % 6 %						• • • • • • • • • • • • • • • • • • • •
Amp. 30 60 100 200 400 600	A 61/2 7 81/2 11 14 17	B 3 3 3,1,2 4 5 5	-30 to 6 C 5 5 5 5 <sup>1</sup> / <sub>2</sub> 6 <sup>1</sup> / <sub>2</sub>	000 Amr D 8 8 9 1014 1212 14	5. 500 V E 11 11 12 14 17 19	olts. A. F F 138 118 138 112 178 1 H	G 41/8 37/8 4 14 4 14 6 14	 			K 2 11 2 11 3 16 4 16 6 14 6 14 6 14	igh Gr	   ade_	3 11	Punc	hed Cli	
Amp. 30 60 100 200 400 600 Amp.	A 61/2 7 81/2 11 14 17	B 3 3 3 <sup>1</sup> / <sub>2</sub> 4 5 5	-30 to 6 C 5 5 5 5 12 6 7 12 9	000 Amr D 8 8 9 1014 1212 14	5. 500 V E 11 11 12 14 17 19 np. 500	olts. A. F 138 138 138 118 178 178 1 H	G 41/8 37/8 4 14 6 14 6 14 A.C., Ft	18ed—	· · · · · · · · · · · · · · · · · · ·		K 211 211 3 % 6 %	igh Gr	   ade M	3 }}  K	Punc	hed Cli	p N
Amp. 30 60 100 200 400 600  Amp.	A 61/2 7 81/2 11 14 17	B 3 3 3,1,2 4 5 5	-30 to 6 C 5 5 5 5 12 6 7 12 9	300 Amr D 8 8 9 10 <sup>1</sup> / <sub>2</sub> 12 <sup>1</sup> / <sub>2</sub> 14 400 Ar D 8	o. 500 V E 11 11 12 14 <sup>1</sup> / <sub>2</sub> 17 19 np. 500 E	olts. A. F 13/8 11/8 11/8 11/8 11/8 11/8 11/8 Volts A	G 41/8 37/8 4 14 6 14 6 14 A.C., Fu	18ed			K 2 11 2 11 3 16 4 16 6 14 6 14 6 14	igh Gran	  ade M 3½	3 }}  K	Punci	hed Cli M 314	p N
Amp. 30 60 100 200 400 600 Amp. 30	A 61/2 7 81/2 11 114 117	B 3 3 3,1,2 4 5 5 5	-30 to 6 5 5 5 5 2 6 2 7 2 930 to C 5 5	300 Amp D 8 8 8 9 10 <sup>1</sup> / <sub>2</sub> 12 <sup>1</sup> / <sub>2</sub> 14 1400 Ar D 8 8	o. 500 V E 11 11 12 14 12 17 19 np. 500 E 11	olts. A. F 13/8 11/8 13/8 11/2 17/8 1 H Volts	G 41/8 37/8 41/4 41/4 63/4 A.C., Fr	18ed—	I 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		K 2 11 2 11 3 16 4 16 6 14 6 14 6 14	igh Gra	  ade M 31/4	3 }}  K 2 }} 2 }}	Pune L 316	hed Cli M 314 314	N 12 13
Amp. 30 60 100 200 400 600  Amp. 30 60 100	A 61/2 7 81/2 11 14 17	B 3 3 3 <sup>1</sup> / <sub>2</sub> 4 5 5	-30 to 6  5  5  5  612  7  9  -30 to  C  5  5  5  4	300 Amp D 8 8 9 101/2 121/2 14 400 Ar D 8 91/2	o. 500 V E 11 12 14/2 17 19 np. 500 E 11 11	olts. A. F 13.8 11.8 11.2 11.2 11.2 11.2 11.2 11.3 11.3 11.3	G 41/8 37/8 4 14 6 14 6 14 4 A.C., Fr	18ed— H 4 16 3 34 4 16	I 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		K 2 11 2 11 3 16 4 16 6 14 6 14 6 14	igh Gra	  ade M 31/4 31/4 31/4	3 社        	Pune L 31/8 31/8	hed Cli M 318 318 318	12 13 161/4
Amp. 30 60 100 200 400 600 Amp. 30	A 61/2 7 81/2 11 114 117	B 3 3 3,1,2 4 5 5 5	-30 to 6 5 5 5 5 2 6 2 7 2 930 to C 5 5	300 Amp D 8 8 8 9 10 <sup>1</sup> / <sub>2</sub> 12 <sup>1</sup> / <sub>2</sub> 14 1400 Ar D 8 8	o. 500 V E 11 11 12 14 12 17 19 np. 500 E 11	olts. A. F 13/8 11/8 13/8 11/2 17/8 1 H Volts	G 41/8 37/8 41/4 41/4 63/4 A.C., Fr	18ed	I 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		K 2 11 2 11 3 16 4 16 6 14 6 14 6 14	igh Gran	  ade M 31/4	3 }}  K 2 }} 2 }}	Pune L 316	hed Cli M 314 314	N 12 13

# **Back Connected Knife Switches**

			NOT OVER	R 125 OR 125	-250 VOLTS		•••	
Ampere	A A	F Inches	G Inches	H Inches	T Inches	V Inches	Inches	Inches
Capacity 30	Inches	11101103	2 4	1 iiches	1 13	24	3 11	
60	3 11	11	3 4	1,4	2 1	2 1	5 📆	
100	712	- 12	584	1,2	3 11	314	5%	
200	کَ هُ	1 🕉	7.*	3%	4 11	413	8	
400	1174	î X	81,	ίĝ	6 🔆	537	101/4	
600	13 👯	2	1012	34	7 🖟	613	1114	
			NOT	OVER 250 V	OLTS			
30	434	+3	2 1	4	2,4	2 } }	5★	7 😤
60	6 11	ij	3 🔆	17	3 📆	358	6 🚻	934
100	714	7 8	$5^{3}_{4}$	12	3 <del>] i</del>	4	71/4	1015
200	9 🐔	1 16	7	3,8	4 18	478	834	128
400	1178	1 🔥	812	1/2	<u>6</u> 1/4	$5^{3}4$	1014	14%
600	13 🔥	2	1012	34	7 ⅓	6) 2	11,12	161/2
			NOT	OVER 600 V	OLTS			
30	7 <del>1 1</del>	3 <u>ú</u>	514	*	4 11	5 🔥	10 <del>ਨ</del> ੂ	14
60	7 ∰	*	$5\frac{3}{4}$	ለ	4 }\$	5 %	10 14	14
100	952	7. <sub>8</sub>	784	1/4	5 ₩	614	11%	1734
200	11 🎠	1 1/4	914	3/6	7 ∱	714	13.4	1938 20
400	1436	1 18	1112	12	81	7.12	13.4	21
600	16 Å	2	$13^{12}$	%	9 H Digi	tized by	oote	اد
Knife Sw	itches. Fuse	s and Cut-Out	8	2-1	Digi	ilized by	910	

## BRYANT BABY KNIFE SWITCHES







No. 1638

No. 164

## SLATE BASE-250 VOLTS

	Single Pole—Mount	ed			Sched	ule "H"
List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W.E. List Each
1636 1637 <sup>4</sup> 1654 1655 <sup>4</sup>	15 Ampere, S. P., S. T. 30 Ampere, S. P., S. T. 15 Ampere, S. P., D. T. 30 Ampere, S. P., D. T.	10	100 100 50 50	45 50 35 37	\$0.40 .50 .68 .84	\$0.64 .80 1.09 1.34
	Single Pole—Unmour	nted			Schedu	ıle "H"
1642 1643*	15 Ampere, S. P., S. T.		100	• •	\$0.40	

an'o n'o m				\$0.40	<b>\$</b> 0.64
pere, S. P., S. T	1	100		.50	. 80
pere, S. P., S. T., Fusible*	1	50		.46	.74
pere, S. P., S. T., Fusible*	1	50		.57	. 91
pere, S. P., D. T	1	50		.68	1.09
pere, S. P., D. T	1	50		.84	1.34
pere, S. P., D. T., Fusible*	1	25		.80	1.28
pere, S. P., D. T., Fusible*	1	25		.98	1.38
1	pere, S. P., S. T., Fusible* pere, S. P., D. T. pere, S. P., D. T. pere, S. P., D. T., Fusible*	pere, S. P., S. T., Fusible* 1 pere, S. P., S. T., Fusible* 1 pere, S. P., D. T 1 pere, S. P., D. T 1 pere, S. P., D. T. 1 pere, S. P., D. T., Fusible* 1 pere, S. P., D. T., Fusible* 1	pere, S. P., S. T., Fusible* 1 50 pere, S. P., D. T 1 50 pere, S. P., D. T 1 50 pere, S. P., D. T 1 50 pere, S. P., D. T., Fusible* 1 25	pere, S. P., S. T., Fusible* 1 50 pere, S. P., D. T 1 50 pere, S. P., D. T 1 50 pere, S. P., D. T 1 50 pere, S. P., D. T 1 50 pere, S. P., D. T., Fusible* 1 25	pere, S. P., S. T., Fusible* 1 50

	Double Pole—Mounted			Schedu	le "H"
1638   15 Ampere, D. P., S. T.		100	100	\$0.50	\$0.80
1639 <sup>4</sup>   30 Ampere, D. P., S. T.		100	105	.60	. 96
1656   15 Ampere, D. P., D. T.		50	75	.86	1.38
1657 30 Ampere, D. P., D. T.		50	78	1.04	1.66

	Double Pole—Unmount	ed			Schedu	le "H"
1644	15 Ampere, D. P., S. T	1	100	• • •	\$0.50	\$0.80
1645	30 Ampere, D. P., S. T	1	100		.60	. 96
1650	15 Ampere, D. P., S. T., Fusible*	1	50		.62 1	. 99
16514	30 Ampere, D. P., S. T., Fusible*	1	50		.74	1.15
1662	15 Ampere, D. P., D. T	1	50		.86	1.38
1663*	30 Ampere, D. P., D. T	1	50		1.04	1.66
1668	15 Ampere, D. P., D. T., Fusible*	1	25		1.10	1.76
1869*	30 Ampere, D. P., D. T., Fusible*	1	25		1 32	2.10

Triple Pole—Mounted				Schedu	le "H"
1640   15 Ampere, T. P., S. T	5 5 1	25 25 10 10	40 45 24 26	\$1.04 1.30 1.40 1.64	\$1.66 2.05 2.24 2.62

\$1.66
2.05
1.95
2.42
2.24
2.62
2.82
3.30

Mounted switches are plain finished, but will be furnished polished on special order at 20 per cent. advance.

Unmounted switches are furnished in polished finish and with back connections suitable for switch-board 1½ inches thick, unless ordered otherwise. Plain finish switches will be furnished on special order at the same price.

A National Electrical Code Standard.

Knife Switches, Fuses and Cut-Outs

<sup>\*</sup>To open length fuses.

# **BRYANT BABY KNIFE SWITCHES**







Mfr. No. 1438

Mfr. No. 1440

#### PORCELAIN BASE—125 VOLTS

Single	. Dala	34-		
Single	e role	M0	unted	

Schedule "H"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W.E. List Each
1436	15 Ampere, S. P., S. T	10	100	40	\$0.34	\$0.54
1437^	30 Ampere, S. P., S. T	10	100	45	.44	. 70
1454	15 Ampere, S. P., D. T	10	50	25	.60	.96
1455	30 Ampere, S. P., D. T	10	50	27	.74	1.18
	Single Pole—Unmoun	ted			Schedu	ıle "H"
1442	15 Ampere, S. P., S. T	1	100		\$0.34	\$0.54
1443*	30 Ampere, S. P., S. T	1	100		.44	.70
1448	15 Ampere, S. P., S. T., Fusible	1	50		.40	. 64
1449	30 Ampere, S. P., S. T., Fusible	1	50	• • •	.51	. 82
1460	15 Ampere, S. P., D. T	1	50	• • •	.60	.96
1461	30 Ampere, S. P., D. T	1	50		.74	1.18
1466	15 Ampere, S. P., D. T., Fusible	1 1	25		.72	1.15
1467	30 Ampere, S. P., D. T., Fusible	1	25	<u> </u>	.88	1.41
	Double Pole—Mount	ed			Schedu	ıle "H"
1438	15 Ampere, D. P., S. T	10	100	65	\$0 42	\$0.67
1439*	30 Ampere, D. P., S. T	10	100	70	.50	.80
1456	15 Ampere, D. P., D. T		50	55	.74	1.18
1457	30 Ampere, D. P., D. T	5	50	58	.90	1.44
	Double Pole—Unmour	nted			Schedu	ıle "H"
1444	15 Ampere, D. P., S. T	1	100	· · ·	\$0.42	\$9.67
1445^	30 Ampere, D. P., S. T	1	100	١	.50	.80
1450	15 Ampere, D. P., S. T., Fusible	1	50	١	. 54	.86
1451	30 Ampere, D. P., S. T., Fusible	1	50		.64	1.02
1462	15 Ampere, D. P., D. T	1	50	l	.74	1.18
14634	30 Ampere, D. P., D. T	ī	50	::	.90	1.44
1468	15 Ampere, D. P., D. T., Fusible		25	::	.98	1.57
14694	30 Ampere, D. P., D. T., Fusible	i	25		1.18	1.89
				<u></u>	Schedi	le "H"
	Triple Pole—Mount					
1440			25	1 30	\$0.90	\$1.44
1440 1441	15 Ampere, T. P., S. T	5	25 25	30 32	\$0.90 1.10	\$1.44
		5 5			1.10	
1441*	15 Ampere, T. P., S. T. 30 Ampere, T. P., S. T. Triple Pole—Unmoun	5 5 <b>ted</b>	25	32	Schedu	1.76
1441	15 Ampere, T. P., S. T	5 5 ted	25	32	1.10 Schedu	1.76 ale "H" \$1.44
1441 <sup>4</sup> 1446 1447 <sup>4</sup>	15 Ampere, T. P., S. T	5 5 <b>ted</b>	25 25 25 25	32	Schedu \$0.90 1.10	1.76 ale "H" \$1.44 1.76
1441 <sup>4</sup> 1446 1447 <sup>4</sup> 1452	15 Ampere, T. P., S. T.   30 Ampere, T. P., S. T.   Triple Pole—Unmoun   15 Ampere, T. P., S. T.   30 Ampere, T. P., S. T.   15 Ampere, T. P., S. T.   15 Ampere, T. P., S. T., Fusible	5 5 ted	25 25 25 25 25	32	Schedu \$0.90 1.10 1.08	1.76 ale "H" \$1.44 1.76 1.73
1441 <sup>4</sup> 1446 1447 <sup>4</sup> 1452 1453 <sup>4</sup>	15 Ampere, T. P., S. T.   30 Ampere, T. P., S. T.   Triple Pole—Unmoun   15 Ampere, T. P., S. T.   30 Ampere, T. P., S. T.   15 Ampere, T. P., S. T.   Fusible   30 Ampere, T. P., S. T., Fus	5 5 ted	25 25 25 25 25 25	32	\$0.90 1.10 1.08 1.31	1.76 ale "H" \$1.44 1.76 1.73 2.10
1441 <sup>4</sup> 1446 1447 <sup>4</sup> 1452 1453 <sup>4</sup> 1464	15 Ampere, T. P., S. T.   30 Ampere, T. P., S. T.   Triple Pole—Unmoun   15 Ampere, T. P., S. T.   30 Ampere, T. P., S. T.   15 Ampere, T. P., S. T., Fusible   30 Ampere, T. P., S. T., Fusible   15 Ampere, T. P., D. T	5 5 ted	25 25 25 25 25 25 10	32	Schedu   \$0.90   1.10   1.08   1.31   1.20	1.76 ale "H" \$1.44 1.76 1.73 2.10 1.92
1441 <sup>4</sup> 1446 1447 <sup>4</sup> 1452 1453 <sup>4</sup> 1464 1465 <sup>4</sup>	15 Ampere, T. P., S. T.   30 Ampere, T. P., S. T.   Triple Pole—Unmoun   15 Ampere, T. P., S. T.   30 Ampere, T. P., S. T.   15 Ampere, T. P., S. T., Fusible   30 Ampere, T. P., S. T., Fusible   15 Ampere, T. P., D. T   30 Ampere, T. P., D. T   30 Ampere, T. P., D. T	5 5 ted	25 25 25 25 25 20 10	32	1.10   Schedu   \$0.90   1.10   1.08   1.31   1.20   1.40	1.76 ale "H" \$1.44 1.76 1.73 2.10 1.92 2.24
1441 <sup>4</sup> 1446 1447 <sup>4</sup> 1452 1453 <sup>4</sup> 1464	15 Ampere, T. P., S. T.   30 Ampere, T. P., S. T.   Triple Pole—Unmoun   15 Ampere, T. P., S. T.   30 Ampere, T. P., S. T.   15 Ampere, T. P., S. T., Fusible   30 Ampere, T. P., S. T., Fusible   15 Ampere, T. P., D. T	5 5 ted	25 25 25 25 25 25 10	32	Schedu   \$0.90   1.10   1.08   1.31   1.20	1.76 ale "H" \$1.44 1.76 1.73 2.10 1.92

Mounted Switches are plain finish, but will be furnished polished on special order at 20 per cent. advance.

Unmounted Switches are furnished in polished finish and with back connections suitable for switchboard 1½ inches thick, unless ordered otherwise. Plain Finish Switches will be furnished on special order
at the same price.

<sup>▲</sup> National Electrical Code Standard.

## BRYANT BABY KNIFE SWITCHES

# For Battery and Telephone Circuits







Mfr. No. 1001

MIII. 110. 77

#### PORCELAIN BASE TYPE "A" SINGLE POLE

Schedule "H"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	List Price Each
1001	15 Ampere, S. P., S. T	10	100	25	\$0.34	\$0.54
977	30 Ampere, S. P., S. T	10	100	27	.44	.79
1039	15 Ampere, S. P., D. T	10	50	18	.60	.96
1040	30 Ampere, S. P., D. T	10 ·	50	20	.74	1.18

PORCELAIN B	ASE-1	CYPE "	A" D	OUBLE	POLE
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Schedule "H"

974	15 Ampere, D. P., S. T	10	100	40	\$0.42	\$0.67
1041	15 Ampere, D. P., D. T	5	50	33	.74	1.18
1042	30 Ampere, D. P., D. T	1	50	35	.90	1.44

#### SLATE BASE-TYPE "A" TRIPLE POLE

Schedule "H"

1158   15 Ampere, T. P., D. T	1 1	10 10	15 17	\$1.20 1.40	
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#### TYPE "A" UNMOUNTED

Schedule "H"

1048	15 Ampere, S. P., S. T	100	 \$0.34	\$0.54
1054	30 Ampere, S. P., S. T	100	 44	.70
1050	15 Ampere, S. P., D. T	50	 .60	.96
1056	30 Ampere, S. P., D. T	50	 .74	1.18
1049	15 Ampere, D. P., S. T	100	 .42	.67
1055	30 Ampere, D. P., S. T	100	 .50	.78
1051	15 Ampere, D. P., D. T	50	 .74	1.15
1057	30 Ampere, D. P., D. T	50	 .90	1.40
1053	15 Ampere, T. P., S. T	25	 .90	1.40
1058	30 Ampere, T. P., S. T	25	 1.10	1.76
1150	15 Ampere, T. P., D. T	10	 1.20	1.92
1151	30 Ampere, T. P., D. T. 1	10	 1.40	2.24

#### PORCELAIN BASE-TYPE "B"

Schedule "H"

1245	15 Ampere, S. P., S. T	10	100	25	\$0.20	\$0.32
1246	30 Ampere, S. P., S. T		100	27	.30	.48
1102	15 Ampere, D. P., S. T	10	100	60	.35	. 56
1074	30 Ampere, D. P., S. T	10	100	65	. 44	.70

Mounted Switches are plain finish, but will be furnished polished on special order at 20 per cent. advance.

Unmounted Switches are furnished in polished finish and with back connections suitable for switch-board 1½ inches thick, unless ordered otherwise. Plain Finish Switches will be furnished on special order at the same price.

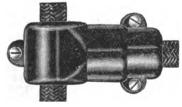
#### DOSSERT WIRE CONNECTORS

#### Dossert Solderless Connectors

For illustrations of the several types of Dossert Connectors listed below, see preceding page. When ordering by list numbers for sizes from No. 14 to No. 0000 always specify whether stranded or solid.

T	Type A 2-Way Connectors		Type B 2-Way Connectors		Type C 2-Way Connectors		2-Way Elbows	
Size of Cable	List No.	List Price Each	List No.	List Price Each	List No.	List Price Each	List No.	List Price Each
*14 to 4	541816	\$0.80	541847	\$0.80	541878	\$0.80	541909	\$0.80
* 3 to 1	541817	1.00	541848	1.00	541879	1.00	541910	1.00
0	541818	1.20	541849	1.20	541880	1.20	541911	1.20
00	541819	1.48	541850	1.48	541881	1.48	541912	1.48
000	541820	1.80	541851	1.80	541882	1.80	541913	1.80
0000	541821	2.20	541852	2.20	541883	2.20	541914	2.20
250000	541822	2.60	541853	2.60	541884	2.60	541915	2.60
300000	541823	3.04	541854	3.04	541885	3.04	541916	3.04
350000	541824	3.48	541855	3.48	541886	3.48	541917	3.48
400000	541825	4.00	541856	4.00	541887	4.00	541918	4.00
450000	541826	4.60	541857	4.60	541888	4.60	541919	4.60
500000	541827	5.20	541858	5.20	541889	5.20	541920	5.20
550000	541828	5.80	541959	5.80	541890	5.80	541921	5.80
600000	541829	6.36	541860	6.36	541891	6.36	541922	6.36
650000	541830	6.88	541861	6.88	541892	6.88	541923	6.88
700000	541831	7.36	541862	7.36	541893	7.36	541924	7.36
750000	541832	7.84	541863	7.84	541894	7.84	541925	7.84
800000	541833	8.32	541864	8.32	541895	8.32	541926	8.32
850000	541834	8.80	541865	8.80	541896	8.80	541927	8.80
900000	541835	9.28	541866	9.28	541897	9.28	541928	9.28
1000000	541836	10.00	541867	10.00	541898	10.00	541929	10.00
1100000	541837	11.00	541868	11.00	541899	11.00	541930	11.00
1200000	541838	12.00	541869	12.00	541900	12.00	541931	12.00
1300000	541839	13.00	541870	13.00	541901	13.00	541932	13.00
1400000	541840	14.00	541871	14.00	541902	14.00	541933	14.00
1500000	541841	15.00	541872	15.00	541903	15.00	541934	15.00
1600000	541842	16.00	541873	16.00	541904	16.00	541935	16.00
1700000	541843	17.00	541874	17.00	541905	17.00	541936	17.00
1800000	541844	18.00	541875	18.00	541906	18.00	541937	18.00
1900000	541845	19.00	541876	19.00	541907	19.00		19.00
2000000	541846	20.00	541877	20.00	541908	20.00	541939	20.00

<sup>\*</sup> Prices of 14 to 4 inclusive, and 3 to 1 inclusive, respectively, are the same, but in ordering state exact size wanted, as inner bore of sleeve must be drilled to fit wire to be connected up.



**Insulated Cover** 



Detail of Insulating Cover for 3-Way Knife Switches, Fuese and Cut-Oute

# Insulated Covers for Cable Taps

I	Each
For No. 1	\$1.32
For No. 0000	2.00
For No. 300,000 C.M	2.20
For No. 500,000 C.M	4.40

# Insulated 3-Way Connector

Insulating cover for 3-way connector takes wires from No. 14 No. 4, inclusive.

List No.		List Price Each
542172	Insulator and connector complete	\$2.50
	Insulator only	
542174	Connector only	1.20

See page elsewhere for additional rizes of insulating covers.

#### DOSSERT WIRE CONNECTORS







### Dossert Solderless Connectors

#### Cable Taps

The Cable Tap is used to connect a branch wire, rod or bleeder to a main wire, rod or feeder. It does not splice the main, but simply clamps on to it.

The Cable Tap can be furnished to connect any size branch wire to any size main wire

#### 3-Way Connector

The 3-way is used to make a main line splice and to connect a branch wire at the joint.

#### "Y" Connector

The "Y" is used to make a 3-way splice when the cables are not at right angles to each other. It can be furnished to connect any three sizes or combinations of wire, cable or rod.

When ordering by list numbers for sizes from No. 14 to No. 0000 always specify whether stranded or solid.

Cable Taps		3-Way Connector	"Y" Connector	
Size	List	List	List	
of	Price	Price	Price	
Cable	Each	Each	Each	
*14 to 4	\$1.20	\$1.20	\$1.20	
* 3 to 1	1.50	1.50	1.50	
0	1.80	1.80	1.80	
00	2.22	2.22	2.22	
000	2.70	2.70	2.70	
0000	3.30	3.30	3.30	
250000	3.90	3.90	3.90	
300000	4.56	4.56	4.56	
350000	5.22	5.22	5.22	
400000	6.00	6.00	6.00	
450000	6.90	6.90	6.90	
500000	7.80	7.80	7.80	
550000	8.70	8.70	8.70	
600000	9. <b>54</b>	9.54	9.54	
	10.32	10.32		
650000	10.32	10.32	10.32	
			11.04	
750000	11.76	11.76	11.76	
800000	12.44	12.44	12.44	
850000	13.20	13.20	13.20	
900000	13.96	13.96	13.96	
1000000	15.00	15.00	15.00	
1100000	16.50	16.50	16.50	
1200000	18.00	18.00	18.00	
1300000	19.50	19.50	19.50	
1400000	21.00	21.00	21.00	
1500000	22.50	22.50	22.50	
1600000	24.00	24.00	24.00	
1700000	25.50	25.50	25.50	
1800000	27.00	27.00	27.00	
1900000	28.50	28.50	28.50	
2000000	30.00	30.00	30.00	

\*Prices of 14 to 4 inclusive, and 3 to 1 inclusive, respectively, are the same, but in ordering state exact size wanted, as inner bore of sleeve must be drilled exactly to fit wire to be connected up.

#### DOSSERT WIRE CONNECTORS







**Back Connected Lug** 



Angle Lug



Swivel Lug

## Dossert Cast Lugs

All lugs are regularly furnished with contact surfaces, undrilled, but if desired bolt holes will be drilled according to specifications without extra charge.

When ordering by list numbers for sizes from No. 14 to No. 0000 always specify whether stranded or solid.

Front Connected Lug		Back Conn	Back Connected Lug		Angle Lug		Swivel Lugs Pair		
Size of Cable	List No.	List Price Each	List No.	List Price Each	List No.	List Price Each	List No.	List Price Per Pair	
*14 to 4	542033	\$0.60	542064	\$0.60	542095	\$0.60	542126	\$1.20	
* 3 to 1	542034	.76	542065	.76	542096	.76	542127	1.52	
0	542035	. 90	542066	.90	542097	.90	542128	1.80	
00	542036	1.12	542067	1.12	542098	1.12	542129	2.24	
000	542037	1.36	542068	1.36	542099	1.36	542130	2.72	
0000	542038	1.66	542069	1.66	542100	1.66	542131	3.32	
250000	542039	1.96	542070	1.96	542101	1.96	542132	3.92	
300000	542040	2.28	542071	2.28	542102	2.28	542133	4.56	
350000	542041	2.62	542072	2.62	542103	2.62	542134	5.24	
400000	542042	3.00	542073	3.00	542104	3.00	542135	6.00	
450000	542043	3.46	542074	3.46	542105	3.46	542136	6.92	
500000	542044	3.90	542075	3.90	542106	3.90	542137	7.80	
550000	542045	4.36	542076	4.36	542107	4.36	542138	8.72	
600000	542046	4.78	542077	4.78	542108	4.78	542139	9.56	
650000	542047	5.16	542078	5.16	542109	5.16	542140	10.32	
700000	542048	5.52	542079	5.52	542110	5.52	542141	11.04	
750000	542049	5.88	542080	5.88	542111	5.88	542142	11.76	
800000	542050	6.22	542081	6.22	542112	6.22	542143	12.44	
850000	542051	6.60	542082	6.60	542113	6.60	542144	13.20	
900000	542052	6.96	542083	6.96	542114	6.96	542145	13.92	
1000000	542053	7.50	542084	7.50	542115	7.50	542146	15.00	
1100000	542054	8.26	542085	8.26	542116	8.26	542147	16.52	
1200000	542055	9.00	542086	9.00	542117	9.00	542148	18.00	
1300000	542056	9.76	542087	9.76	542118	9.76	542149	19.52	
1400000	542057	10.50	542088	10.50	542119	10.50	542150	21.00	
1500000	542058	11.26	542089	11.26	542120	11.26	542151	22.52	
1600000	542059	12.00	542090	12.00	542121	12.00	542152	24.00	
1700000	542060	12.76	542091	12.76	542122	12.76	542153	25.52	
1800000	542061	13.50	542092	13.50	542123	13.50	542154	27.00	
1900000	542062	14.26	542093	14.26	542124	14.26	542155	28.52	
2000000	542063	19.00	542094	19.00	542125	19.00	542156	30.00	

<sup>\*</sup> Prices of 14 to 4 inclusive, and 3 to 1 inclusive, respectively, are the same, but in ordering state exact size wanted, as inner bore of sleeve must be drilled exactly to fit wire to be connected up.

#### Reducers

Reducers are made in 2-ways and 3-ways. The accompanying cut shows a 2-way reducer.

Any combination of reduction can be effected by means of these reducers, and they are used to a great extent in connecting solid round busses on switchboards to feeder cables.

To ascertain the list price of a 2-way reducer, take one-half of the price of a regular 2-way of the corresponding size of each end. For example: Reducer from 500000 C.M. to No. 0000.



1/2 of 2-way for 500000 C.M		\$2.60
1/2 of 2-way for No. 0000		1.10
The list price would then be	Digitized by GOOGIC	2 70

#### DOSSERT WIRE CONNECTORS



Stud Connector, Type F



Stud Connector, Type M

#### Dossert Solderless Connectors

#### Type F

Stud Connector Type F is used to connect a wire or cable to a stud or threaded rod. When ordering Type F Stud Connectors, give diameter and number of threads per inch of stud or rod that the connector is screwed onto, the circular millage of cable or gauge number of wire, and state whether wire is solid or stranded.

#### Type M

Type M is used to connect wires or cables to flat strips of blocks.

When ordering Type M Stud Connectors, give diameter and length of stud and number of threads per inch, the circular millage of cable or gauge number of wire, and state whether wire is solid or stranded.

List price of Type F and Type M Stud Connectors same as a two-way of corresponding size less 20%,

except when special large diameter or length of stud is specified.



Detail of Insulating Cover



Insulated Joint Complete

#### Dossert Insulating Covers

#### For Use with Connectors

The material used in the manufacture of this cover is heat-resisting, non-hygroscopic, of good dielectric strength and mechanically very strong. The arrangement is in two parts, with a threaded coupling and shoulders which lock against the ends of the connectors, thus holding firmly in position as shown in above sectional view. The cover here, as shown above, is for conductors from No. 0, B. & S. Gauge, to 250,000 cir. mils. A wide range of conductor openings is provided to accommodate various thicknesses of insulation. This cover can be furnished for a number of types and sizes of Dossert connectors.

Lis <b>t</b> No.	Description	Price Each
542157	Connector and cover for No. 1 to No. 14 C.M. Conductor	\$1.52
542209	Connector and cover for No. 4 to No. 14 Conductor	1.20
542158	Connector and cover for No. 0 Conductor	2.12
542159	Connector and cover for No. 00 Conductor	
542160	Connector and cover for No. 000 Conductor	
542161	Connector and cover for No. 0000 Conductor	
542162	Connector and cover for 250,000 C.M. Conductor	3.80

## Grounding Device



Grounding Device

The Grounding Cap is used for connecting ground wires to the end of a pipe. One end of the cap is threaded to take a stranded gas pipe, while the other end is fitted with a compression nut and tapered sleeve, by means of which the wire is

When ordering, give size of gas pipe and circular millage or gauge number of wire, and state whether stranded or solid conductor.

List No.	Size Wire	Size Pipe Inches	List Price Each
542163	No. 14 to 1	3/8	<b>\$</b> 0.96
542164	No. 14 to 1	1/2	. 88
542165	No. 14 to 1	3/4	1.24
542166	No. 14 to 1	i	1.50
542167	No. 0 to 0000	1/2	1.50
542168	No. 0 to 0000	3/1	1.60
542177	No. 0 to 0000	1 7	1.70

Any other sizes desired will be made according to specification.

Schedule "I"

## BRYANT ENTRANCE SWITCHES AND BOXES



Mfr. No. 1695



Mfr. No. 1692

DOUBLE POL	E. 30	AMPERES.	125	VOLTS
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List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
1695	Fuses at the top	1	100	170	\$0.90	\$1.80
1981	Fuses at the bottom	1	100	170	. 90	1.80

	TRIPLE POLE, 30 AMPERES,	125	VOLTS		Sched	lule "l"
1693▲ 1986▲	Fuses at the top, same style handle as No. 1695 Fuses at the bottom same style handle as No. 1695	1	50 50	150 150	\$1.40 1.40	\$2.80 2.80
	DOUBLE BOLE 20 AMBERES	10	VOI TO		C-1	11. 44121

DOUBLE POLE, 30 AMPERES	, 125	VOLIS		Sched	ule "I"
*1692*   Fuses at the top	1	100 100	240 240	\$1.00 1.00	\$2.00 2.00



No. 1851



No. 1852



No. 1984



No. 1987

## **Bryant Panel Switches**

30 Ampere, Double Pole, Single Branch

Schedule "I"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. `Wt. Lbs.	Mfrs. List Fach	W. E. List Each
1851▲ 1982▲	Fuses at the top	1	100 100	210 210	\$1.00 1.00	\$2.00 2.00

30 Ampere, Double Pole, D	Double 1	Branch		Sched	ule "I"
For Vertical Mains		50 50	180 180	\$2.00 2.00	\$4.00 4.00

30 Ampere, T. P. to D. P., Do	uble Bra	ınch		Schee	dule "I"
For Vertical Mains	1 .	50 50	220 220	\$2.10 2.10	\$4.20 4.20

	30 Ampere, Double Pole, S	ingle	branch		Sched	luie - I
*1694 <b>*</b> *1987 <b>*</b>	Fuses at the top	1 1	50 50	130 130	\$1.10 1.10	\$2.20 2.20

<sup>\*</sup> These Switches were approved for use on 250-Volt circuits prior to the change of rules adopted by the Underwriters' National Electrical Association at their meeting of March, 1909. We continue to list them as they have greater spacings than the 125-Volt switches of the same description listed above, and may, on that account, be preferred by some, although it will be understood that they will only be approved when installed on circuits of 125 volts and under.

A National Electrical Code Standard.

#### PERKINS PANEL SWITCHES







No. 2700

No. 2599

No. 2300

#### Perkins Panel Switches

Schedule "H"

Each branch is fitted with a 10 ampere double pole switch, which is mounted on a separate base and may be removed without disturbing either main or branch connections. These switches may be installed in any standard cabinet having a minimum depth of 3 inches.

#### WITH CONNECTIONS FOR PLUG FUSES-10 AMPERES, 125 VOLTS

List	*With Dead Fronts and Push B	utton	Switches	i .	Mfr's. List	List Price
No.	,	Carton	Std. Pkg.	Pkg. Wt.	Each	Each
2698▲	Double pole, single branch, 61/4 x 3 inches		10	٠.,	\$2.25	\$3.60
<b>2699</b>	Double pole, double branch, $10\frac{1}{2} \times 3$ inches	1	10		3.50	5.60
<b>2700</b> ▲	Triple to double pole, double branch, 115/8 x 3 inches	1	10		3.75	6.00
	*With Dead Fronts and Rotar	ry Swi	tches			
2598▲	Double pole, single branch, 61/4 x 3 inches	1	10	27	\$2.00	\$3.20
2599	Double pole, double branch, $10\frac{1}{2} \times 3$ inches	1	10	45	2.50	4.00
<b>2600</b>	Triple to double pole, double branch, 115% x 3 inches	1	10	45	3.25	5.20
	With Open Fronts and Rotar	y Swit	ches			
2400	Double pole, single branch, 6½ x 3 inches	1	10	15	\$1.60	<b>\$2</b> .56
2300	Double pole, double branch, $10\frac{1}{2} \times 3$ inches		10	17	2.25	3.65
2360	Triple to double pole, double branch, 11% x 3 inches	1	10	20	3.00	4.80







No. 2685

No. 2688

No. 2535

#### Perkins Panel Switches

#### WITH CONNECTIONS FOR CARTRIDGE FUSES-10 AMPERES, 250 VOLTS

List	*With Dead Fronts and Push Bu	itton :	Switches		Mfr's. List	List Price
No.		Carton	Std. Pkg.	Pkg. Wt.	Each	Each
2684	Double pole, single branch, $7\frac{1}{2} \times 3$ inches	1	10		\$2.25	\$3.65
<b>2685</b> ▲	Double pole, double branch, 12 1/2 x 3 inches	1	10	• •	3.50	5.60
2686▲	Triple to double pole, double branch, 14 x 3 inches	1	10	• •	3.75	6.00
	*With Dead Fronts and Rotar	y Swit	ches			
<b>2687</b>	Double pole, single branch, 7½ x 3 inches	1	10		\$2.00	<b>\$3</b> .20
2688	Double pole, double branch, 1218 x 3 inches	ļ	10	• •	3.00	4.80
2689▲	Triple to double pole, double branch, 14 x 3 inches	1	10	• •	3 . 25	5.20
	With Open Fronts and Rotary	/ Swite	ches			
2534	Double pole, single branch, $7\frac{1}{2} \times 3$ inches	1	10	27	\$1.60	<b>\$2</b> .56
2535▲	Double pole, double branch, 1213 x 3 inches	1	10	45	2.25	3.65
2536▲	Triple to double pole, double branch, 14 x 3 inches	I	10	45	3.00	4.80
	MECHANISMS					
2595▲	Rotary, without handle	10	100		\$0.71	\$1.14
25234	Push button		50		. 80	1.28

\*The covers of these switches are steel, lined with insulating material. Each cover has an overhanging edge which engages with the cover of the adjoining switch, thereby effectively preventing accidental contact with any live parts. Covers are the same length as the bases. Orders will regularly be filled with switches having dull black covers. White enamel covers will be supplied when specified without extra charge. All other finishes on covers, add to list price \$1.20. To Mfrs. List \$0.50:

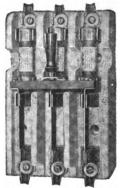
▲National Electrical Code Standard.

## "D & W" ENTRANCE CUT-OUTS

NATIONAL ELECTRICAL CODE STANDARD







## 60 Amperes, 250 Volts

#### For Cartridge Fuses

List No.	Ampere Capacity	Volts	Description	Std. Pkg.	Pkg. Net Wt.	Mírs. List Each	*List Price Each
25050	31-60	125	Double Pole	10	42 lbs.	\$1.95	\$3.90
25051	31-60	125		5	30 lbs.	2.80	5.60



Mfr. No. 25028



Mfr. No. 25029

## 30 Amperes, 125 Volts

#### For Plug Fuses

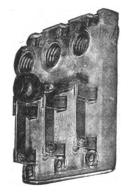
List No.	Ampere Capacity	Volts	Description	Std. Pkg.	Pkg. Net Wt.	Mfrs. List Éach	*List Price Each
25028	30	125	Double Pole	100	150	\$0.90	\$1.44
25029	30	125		100	190	1.00	1.60

## "D & W" ENTRANCE CUT-OUTS AND SWITCH BOXES

NATIONAL ELECTRICAL CODE STANDARD



Mfr. No. 25030



Mfr. No. 25031

## 30 Amperes, 125 Volts

#### For Plug Fuses

List No.	Ampere Capacity	Volts	Description	Std. Pkg.	Pkg. Net Wt.	Mfrs. List Each	*List Price Each
*25030	30	125	Double Pole	100	200	\$1.00	\$1.60
25031	<b>3</b> 0	125		50	175	1.40	2.24

<sup>•</sup> These Cut-outs are spaced and were formerly approved for 250 Volts.



Mfr. No. 25022 For Conduit Connection



Mfr. No. 25033 For Open Wiring

#### Switch Boxes with Cut-outs

#### With Cover Hinged on End

List No.	Туре	Ampere Capacity	Volts	• Description	Std. Pkg.	Pkg. Net Wt.	Mfrs. List Each	*List Price Each
25022	J-6	30	125	Double Pole	25	100	\$3.00	\$3.96
25023	J-7	30	125		25	225	3.50	4.62
25024	J-8	30	125		25	340	4.00	5.28

#### With Cover Hinged on Side

25032	J	30	125	Double Pole	25	160	\$3.00	\$3.96
<b>25</b> 033	J-2	30	125	Double Pole	25	225	3.50	4.62
25034	J-3	30	125	Triple Pole	25	340	4.00	5.28

Delivery F. O. B. Factory, Providence, R. I. For warehouse deliveries write nearest house.

## Western Electric

## **BRYANT CUT-OUTS** 30 Amperes, 125 Volts



Mfr. No. 62569

List

No. 62569

629654 619354

8020



Mfr. No. 62965



Mfr. No. 61935



Mfr. No. 8020

Schedule "l"

#### Plug Cut-outs

Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
Single Pole, Main Double Pole, Main Double Pole, Single Branch Double Pole, Single or Double Cross-over Branch	10 5	150 150 100 150	70 ·100 95 165	\$0.18 .30 .32 .36	\$0.36 .60 .64 .72



Mfr. No. 62587



Mfr. No. 62199



Mfr. No. 62165

## Plug Cut-outs

Schedule "I"

List <sub>i</sub> No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
62587 <sup>4</sup> 62199 <sup>4</sup> 62165 <sup>4</sup>	Double Pole, Double Branch	5	100 100 100	160 170 102	\$0.62 .64 .44	\$1.24 1.28 .88



Mfr. No. 8042



Mfr. No. 62135



No. 559 (1 Actual Size)
Illustrating Method of Using
Plug No. 559

## Plug Cut-outs

Schedule "I"

List No.	Description	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
8042 <b>^</b> 62135 <b>^</b>	Triple Pole, Single Branch	1	75 50	195 150	\$0.62 .90	\$1.03 1.80
					Schedu	ıle "H"

5594 Short circuiting plug for service cut-outs and entrance 300 \$0.05 \$0.12 75

#### Western Electric

## FUSE LINKS AND WIRE



#### Standard Car Fuses

These fuses are made with copper terminals and flat fuse strips. Length, center to center of slots,  $2\frac{1}{2}$  inches. Standard package contains 100 fuses.

List No.	Ampere Capacity	Style	List Price per 100		List No.	Style	Ampere Capacity	List Price per 100
541411	5Ó °	Round	\$7.00	- 11	541415	Flat	150	\$8.40
541412	75	Flat	7.00	ll l	541416	Flat	200	10.00
541413	100	Flat	7.00		541417	Flat	225	12.00
541414	125	Flat	8.40	1	541418	Flat	250	12.00



## Round Fuse Wire

1/8 to 200 Amperes

List No.	Safe Carrying Capacity		s for Use, and s for such Lengths.	Lgth. p	er Lb.	Mils.	One Package Contains	List Price per Lb.
	Amperes	Inches	Amperes	Ft.	ln.		0	
3500	1/8	11/2	3/4	10800		5	2 oz.	•
3501	1/8 1/4 1/2 8/4	112	1,70	2700		10	2 oz.	
3502	1/2	11/2	31/2	950		17	2 oz.	\$5.50
3503	3/4	11/2	3,20	810		181/2	8 oz.	5.50
3504	1	1½	1 4.3	670		20	8 oz.	2.20
3505	11/2	11/2	$5_{10}^{10}$	510		23	8 oz.	2.10
<b>3506</b>	2	11/2	6	430		25	8 oz.	2.10
3507	3 4	11/2	$6_{70}$	370		27	8 oz.	2.00
3508	4	112	8	300		30	1 lb.	2.00
3 <b>5</b> 09	5	2 2 2 2 2 2 2 2 3 3	9	220		35	1 lb.	2.00
3510	6 7	<b>1</b> , <b>2</b>	10,10	185		38	1 lb.	1.70
3511	7	2	123	140		44	1 lb.	1.70
3512	1 8	2	13 10	120		47	1 lb.	1.60
3513	9	2	17	93		54	1 lb.	1.60
3514	10	2	19 ե	80		58	1 lb.	1.60
3515	12	3	19	70		62	1 lb.	1.60
3516	14	3	21	60		68	1 lb.	1.60
3517	15	3	221/2	52		70	1 lb.	1.50
3518	16	3	24	49		75	1 lb.	1.50
3519	18	3	27	43		80	1 lb.	1.50
3520	20	4	27	<b>3</b> 6		85	1 lb.	1.50
3521	25	4	30	32		90	1 lb.	1.50
3522	30	4	35	26		100	1 lb.	1.50
3523	35	4	40	22		110	1 lb.	1.50
3524	40	4	46	18		120	2 lbs.	1.50
3525	45	4	49	17		125	2 lbs.	1.50
3526	50	4	63	12	6	145	2 lbs.	1.50
3527	60	5	70	10	3	160	2 lbs.	1.40
3528	70	5	78	9		175	2 lbs.	1.40
3529	75	5	83	8	3	180	2 lbs.	1.40
3530	80	5	. 88	7	6	190	2 lbs.	1.40
3531	90	4 5 5 5 5 5	94	6	8	200	2 lbs.	1.40
3532	100	5	110	5	6	220	2 lbs.	1.40
3554	125		135	4	2	255	5 lbs.	1.40
3555	150	5 5	165	3	$\overline{2}$	290	5 lbs.	1.40
3556	175	5	200	2	5	330	5 lbs.	1.40
3557	200	5	240	ī	11	365	5 lbs.	1.40

All fuse wire is carefully wound on spools having heavy flanges, which effectually protect the soft fusible metal from abrasion or other mechanical injury; these are then placed in small cans that are properly labeled and sealed so that fuse wire may be stored away for an indefinite time without the slightest depreciation in quality or appearance. For the number of feet per pound, diameter in mils, and the proper length to obtain best results at rated capacity, see above.

## FUSE RIBBON AND LINK FUSES



## Fuse Ribbon

		400 141220	· · · · · · · · · · · · · · · · · · ·		
List No.	Carrying Capacity Amperes	Standard Length Inches	Size in Inches	Feet per Lb.	List Price per Lb.
35315	50	4	.36 x .047	13	\$1.20
35325	60	4	.44 x .047	10	1.20
3533	70	4	.47 x .047	9.55	1.20
3534	75	4	.50 x .047	9.1	1.20
3535	80	4	.375 x .078	7.1	1.20
3536	90	4	.44 x .078	6.1	1.20
3537	100	4	.44 x .094	5.2	1.00
3538	115	4	.375 x .125	4.4	1.00
3539	125	4	.50 x .094	4.4	1.00
3540	150	4	.57 x .094	4	1.00
3541	175	ā	.64 x .094	$\hat{3}.5$	1.00
3542	190	Ä	.75 x .094	3	1.00
3543	200	i	.875 x .094	2.6	1.00
3544	$\frac{200}{225}$	Ä	1. x .094	2.2	1.00
3545	250	41/2	1. x.110	1.9	1.00
3546	275	4/2	1. x .130	1.65	1.00
3547	300	41/2	1. x.150	1.4	1.00
3548	350	41/2	1.94 x .075	1.43	1.00
3549	400		1.94 x .075		1.00
3550	450	41/2	1.125 x .20	1.1 .97	1.00
3551		41/2			1.00
	500	41/2	1.25 x .20	.85	
3552	550	41/2	1.37 x.20	.78	1.00
3553	600	$4\frac{1}{2}$	1.50 x 20	.70	1.00

Standard package 10 lbs. assorted.





3 A Terminal. Slot 1 Inch 5 A Terminal. Slot 1/4 Inch 4 A Terminal. Slot 1/4 Inch 6 A Terminal.

6 A Terminal. Slot ½ Inch 8 A Terminal. Slot ¾ Inch 1 B Terminal. Slot ⅓ Inch



2½ B Terminal. Slot 14 Inch 10 C Terminal. Slot 1/2 Inch

## Open Link Fuses

"A" terminals have one slot parallel and one slot perpendicular to the center line of the link, "B" terminals have both slots parallel and "C" terminals, both perpendicular to center line. Made in all styles except where specially noted.

_			List	Price per	100
List		No.	11/2 Inch	3½ Inch	5 Inch
No.	Amperes	Terminal	Centers	Centers	Centers
541474	1-5	1 B	<b>\$4</b> .60	<b>\$</b> 6.00	\$8.00
541475	5-30	2½B	6.00	8.00	10.00
541476	35-100	3	6.00	10.00	12.00
541477	35-100	4	8.00	12.00	16.00

Standard package: 100 of one size.

			List Pric	ce per 100
List		No.	5 Inch	8 Inch
No.	Amperes	Terminal	Centers	Centers
541482	100-400	8	\$50.00	\$80.00
541483	410- 600	8	80.00	120.00
541484	610- 800	8	110.00	160.00
541485	810-1000	8	150.00	200.00

Standard package: 25 assorted.

			List	Price per	100
List		No.	21/2 Inch	5 Inch	8 Inch
No.	Amperes	Terminal	Centers	Centers 1	Centers
541478	25-100	5	\$20.00	\$30.00	\$40.00
541479	110-200	5 or 6	24.00	36.00	48.00
541480	210-400	6	30.00	45.00	60.00
541481	410-600	6	45.00	60.00	80.00
Sta	andard pa	ckage: 5	0 of asso	rted size	<b>3.</b>

			List Price	per 100
. List		No.	4 Inch ·	8 Inch
No.	Amperes	Terminal	Centers	Centers
541486	100- 200	10 C	<b>\$</b> 80.00	\$120.00
541487	210-400	10 C	90.00	140.00
541488	410- 600	10 C	100.00	160.00
541489	610- 800	10 C	120.00	180.00
541490	810-1000	.10 C	150.00	200.00

Standard package: 25 assorted. Prices on larger sizes on application.

## Western Electric

#### **FUSE PLUGS**







Paiste No. 2203 Fuse Plug Complete



Fusette



Paiste No. 200 Holder



Cross Section Vie "Paiste Fusette"

## Bryant "Pyrotite" Fuse Plugs

Schedule "I"

List	Capacity	Std.	Pkg. Wt	. Mfrs. Lis	t —W. l	E. List—	List	Capacity	Std. F	kg. Wt.	Mfrs. Lis	t —W. I	E. List—
No.	Amperes	Pkg.	Ľbs.	Each	Each	per 100	No.	Amperes	Pkg.	Lbs.	Each	Each	per 100
66327	3	500	45	<b>\$</b> 0,07	\$0.30	\$5.25	66335	15	500	45	<b>\$</b> 0.0 <b>7</b>	\$0.30	\$5.25
66329	6	500	45	.07	.30	5.25	663374	20	500	45	.07	.30	5.25
66331▲	10	500	45	. 07	.30	5,25	663394	25	500	45	. 07	.30	<b>5</b> . <b>25</b>
66333▲	12	500	45	.07	. 30	5.25	663414	30	500	45	. 07	. 30	5.25

Carton quantity for fuse plugs is 100.

The above fuses can also be furnished with solid brass caps on special order. Add to W. E. List Price, \$0.009. To Mfrs List \$0.005.

For Plug Fuses with Special Finish Caps, add to W. E. List Price \$0.05. To Mfrs. List \$0.03.

National Electrical Code Standard.

## Paiste "Fusette" Fuse Plugs

This fuse plug consists of two parts; the interchangeable holder, into which will fit all the fusettes from 3 amperes to 30 amperes, and the fusette or fuse carrying part.

#### Fuse Plug Complete

List No.	Capacity Amperes	Carton Quantity	Std. Pkg.	Mfrs. List Each		List— per 100	List No.	Capacity Amperes			Mfrs. List Each	—W. E Each	List— per 100
2203	3	50	500	\$0.07	\$0.30	\$5.25	2215	<b>i</b> 5	50	500	\$0.07	\$0.30	\$5.25
2206	6	<ul><li>50</li></ul>	<b>5</b> 00	.07	. 30	5.25	2220	20	50	500	.07	.30	5.25
2210	10	<b>5</b> 0	500	.07	.30	5.25	2225	25	50	500	. 07	. 30	5.25
2212	12	<b>5</b> 0	500	.07	. 30	5.25	2230	30	50	500	.07	. 30	5.25
						Fusett	e Only	•					
203	3	50	500	<b>\$</b> 0.05	. 24	4.00	215	15	50	500	.05	. 24	4.00
206	6	50	500	.05	. 24	4.00	220	20	50	500	.05	. 24	4.00
210	10	50	500	.05	.24	4.00	225	25	50	500	.05	. 24	4.00
212	12	50	500	.05	.24	4.00	230	30	50	<b>5</b> 00	.05	. 24	4.00



Holder Only Carton Mfrs. List

Quan- Std.
Description tity Pkg. -W. E. List-List Each Each per 100 200 Holder only, 50 500 \$0.04 \$0.20 \$3.00

## G. E. Enclosed Fuse Plugs

125 VOLTS		List No.	Amp. Capa- city	Mfrs. List Each	W. E. List Each	W. E. List per 100
TOTAL STATE	(1) 13 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	10979	10	<b>\$0</b> .60	\$2.00	\$92.00
2 LOAMBE E		10980	20	60	2.00	92.00
THES.		10981	30	.60	2.00	92.00
		10982	40	.60	2 00	92.00
E.	G. E. Enclosed Fuse Plug	10983	50	.60	2.00	92.00
Six-in-one Fuse Plug	60 Amp. 250 Volts	10984	60	. 60	2.00	92.00
For refilling W. E. List Price	Each \$1.00. Mfrs. Lis	t \$0.30.				

#### SIX-IN-ONE FUSE PLUG

List No.		Wt. Pkg.	Std. Pkg.	Mfrs. List Each	W. E. List Each	W. E. List per 100
542210	Six-in-one fuse plug (Made in 3, 6, 10, 15, 20, 25 or 30 amperes maximum voltage)	10		ize <b>\$</b> 0y <b>35</b>		\$42.00
	44		Kı	aife Switcher	s, Fuses and	Cut-Oute

#### Western Electric

## "D & W" PLUG FUSE CASES AND FUSES

## Plug Fuse Cases

NATIONAL ELECTRICAL CODE STANDARD

#### 0-60 Amperes, 125 Volts

These fuse cases are made in two types, No. 190, 0-30 amperes, being designed for standard cartridge fuses within its range, and No. 191, 31 to 60 amperes, designed for standard cartridge fuses within that range.

List No.	Amp. Cap.	For Fuses	Carton Quantity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
190	0-30	N. E. C. Std	25	100	17	\$0.18	\$0.28
191	31-60		25	100	50	.36	.56



List No. 190





List No. 41



After Blowing

## Type "C" Indicating Plug Fuses

3-30 Amperes, 125 Volts

These plug fuses are designed for standard Edison plug cut-outs, and afford a positive indication when the fuse has blown. These fuses may be reloaded.

List No.	Amp. Capac- ity	Carton Quan- tity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each	List No.	Amp. Capac- ity	Carton Quan- tity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
403	3	25	100	9	\$0.43	\$0.67	412	12	25	100	9	<b>\$0</b> .43	\$0.67
404	4	25	100	9	. 43	.67	415	15	25	100	9	. 43	. 67
405	5	25	100	9	. 43	. 67	418	18	25	100	9	. 43	.67
406	6	25	100	9	. 43	. 67	420	20	25	100	9	. 43	. 67
408	8	25	100	9	43	. 67	425	25	25	100	9	.43	. 67
410	10	25	100	9	. 43	. 67	430	30	25	100	9	.43	. 67

Above can be reloaded for W. E. List each \$0.50, at Mfrs. List for 80.25.



3-30 Amp.



35-75 Amp.

## Type "B" Plug Fuses 3-75 Amperes, 250 Volts Old Code

These fuse cartridges are for use in connection with Old Code Type B plug fuse cases, and are made in ranges of from 3 to 30 amperes, designed for 30 ampere, and from 35 to 75 amperes, designed for 75 ampere cases.

List No.	Amp. Capac- ity	Carton Quan- tity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. W. E. List List Each Each	List No.	Amp. Capac- ity	Carton Quan- tity	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
103	3	50	100	3	\$0.18 <b>\$0.28</b>		30	50	100		\$0.18	
104	4	50	100	3	18 . 28	135	35	25	100	12	.35	. 55
105	5	50	100	3	.18 .28	. 140	40	25	100	12	.35	. 55
106	6	50	100	3	. 18 . 28	145	45	25	100	12	.35	. 55
108	8	50	100	3	.18 .28	150	50	25	100	12	.35	
110	10	50	100	3	.18 .28	155	55	25	100	12	.35	. 55
112	12	50	100	3	.18 .28	160	60	25	100	12	.35	. 55
115	15	50	100	3	.18 .28	165	65	25	50	6	.90	1.40
118	18	50	100	3	.18 .28	170	70	25	50	6	.90	1.40
120	20	50	100	3	.18 .28	175	75	25	50_	60	0.90	1.40
125	25	50	100	3	.18 .28			Digitize	d by G	108		

NATIONAL ELECTRICAL CODE STANDARD

The mechanical design of "D & W" fuses has been rendered as nearly correct in all particulars as possible to conform to the requirements of the National Electrical Code. Exceptionally heavy fibre tubes with extra long caps are used throughout. Where extreme rigidness is required, as in large fuses, the tubes are fitted inside with steel reinforcing rings which are so placed as to receive the ends of all the screws which hold on the fuse caps. The strength and rigidity obtained by passing these machine screws into the steel bands within the fibre tubes enable the fuse to withstand great mechanical abuse and the severest electrical conditions.

A special feature of "D & W" fuses is, that whenever possible, the copper terminal wires in the fusible links are fastened together so as to be both mechanically and electrically continuous, even before the application of solder.

An important and distinctive feature of "D & W" fuses is the so-called "Bull's-eye Indicator." The location of the indication is absolutely defined and the indication itself is extremely distinct, not requiring close inspection as is the case with other types.



Construction of Fuses from 3 to 60 Amperes

3 to 60 Amperes, 250 Volts

List No.	Ampere Capacity	Length Inches	Carton Quantity	Std. Pkg. Quantity	Pkg. Net Wt.	Mfrs. List Each	W. E. List Each	Reload Price Each
- M. N. S. J.			For 30 Am	pere Cut-O	uts			
91125	1 3	2	10	100	4 lbs.	\$0.25	\$0.36	-
91126	4	2	10	100	4 lbs.	.25	.36	(E)
91127	5	2	10	100	4 lbs.	.25	.36	1
91128	6	2	10	100	4 lbs.	.25	.36	P
91130	7	2 2	10	100	4 lbs.	.25	.36	LA
91131	8	2	10	100	4 lbs.	.25	.36	REFILLABLE
91132	9	2	10	100	4 lbs.	.25	.36	E
91133	10	2	10	100	4 lbs.	.25	.36	田
91134	12	2	10	100	4 lbs.	.25	.36	1
91135	15	2	10	100	4 lbs.	.25	.36	F
91136	20	2	10	100	4 lbs.	.25	.36	TON
91137	25	2 2	10	100	4 lbs.	.25	.36	Z
91138	30	2	10	100	4 lbs.	.25	,36	1.11
			For 60 An	pere Cut-O	uts			
91139	35	3	10	100	10 lbs.	\$0.35	\$0.50	1 .
91140	40	3	10	100	10 lbs.	.35	.50	HE
91141	45	3	10	100	10 lbs.	.35	.50	233
91143	50	3	\ 10	100	10 lbs.	.35	.50	BER
91146	55	3 .	10	100	10 lbs.	.35	.50	NOT REFILI ABLE
91147	60	3	10	100	10 lbs.	.35	.50	-



Construction of Fuses from 65 to 100 Amperes

65 to 100 Amperes, 250 Volts

List No.	Ampere Capacity	Length Inches	Carton Quantity	Std. Pkg. Quantity	Pkg. Net Wt.	Mfrs. List Each	W. E. List Each	Mfrs. Reload Each	W. E. Reload Each
W	E at a	1	For 10	0 Ampere			Ducii	Data	Duci
91149	65	57/8	5	50	14 lbs.	\$0.90	\$1.30	\$0.60	\$0.86
91150	70	57/8	5	50	14 lbs.	.90	1.30	.60	.86
91151	75	57/8	5	50	14 lbs.	.90	1.30	.60	.86
91152	80	57/8	5	50	14 lbs.	.90	1.30	60	.86
91153	85	57/8	5	50	14 lbs.	.90	1.30	.60	.86
91154	90	57/8	5	50	14 lbs.	.90	1.30	.60	.86
91155	95	57/8	5	50	14 lbs.	.90	1.30	.60	.86
91156	100	57/8	5	50	14 lbs.	.90	1 30	.60	.86

Refilled Fuses

NATIONAL ELECTRICAL CODE STANDARD



Construction of Fuses from 110 to 1000 Amperes

## 110 to 1000 Amperes, 250 Volts

List	Ampere	Length	Carton	Std.	Pkg.	Mfrs.	W. E.	Mfrs.	W. E.
No.	Capacity	Inches	Quantity	Pkg.	Net	List	List	Reload	Reload
	Capacity	110000	Quantity	Quantity	Wt.	Each	Each	Each	Each
				•					
			F	for 200 Amp	ere Cut-Ou	ıts			
91157	110	71/8	5	25	18 lbs.	\$2.00	\$2.88	\$0.90	\$1.29
91158	120	7½8 7½8	5	25	18 lbs.	2.00	2.88	.90	1.29
91161	125	71/8	5	25	18 lbs.	2.00	2.88	.90	1.29
91162	150	71/8	5	25	18 lbs.	2.00	2.88	.90	1.29
91163 91164	175 200	71/8	5 5	25 25	18 lbs. 18 lbs.	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	2.88 2.88	.90	1.29 1.29
91104	1 200	71/8	0	20	18 108.	1 2.00	2.00	90	1.29
			-						
			r	or 400 Amp	ere Cut-Ou	it <b>s</b>			
91165	225	85/8	5	25	40 lbs.	\$3.60	\$5.18	\$1.50	\$2.16
91166	250	85/8	5	25	40 lbs.	3.60	5.18	1.50	2.16
91167	275	85/8	5 -	25	40 lbs.	3.60	5.18	1.50	2.16
91168	300	85/8	5 5 5	25 25	40 lbs.	3.60	5.18	1.50	2.16
91169	325 350	85/8 85/8	ဥ	25 25	40 lbs. 40 lbs.	3.60	5.18	1.50	2.16 2.16
91170 91171	375	85/8 85/8	-5	25	40 lbs.	$\frac{3.60}{3.60}$	5.18 5.18	1.50	2.16
91172	400	85/8	5	25	40 lbs.	3.60	5.18	1.50	2.16
			F	or 600 Amp	ere Cut-Ou	its			
91173	450	103/	1	10	28 lbs.	\$5.50	\$7.92	1 00 00 1	\$2.88
91174	500	10 <sup>3</sup> / <sub>8</sub> 10 <sup>3</sup> / <sub>8</sub>	i	10	28 lbs.	5.50	7.92	\$2.00 2.00	2.88
91175	550	103/8	î	10	28 lbs.	5.50	7.92	2.00	2.88
91176	600	103/8	î	iŏ	28 lbs.	5.50	7.92	2.00	2.88
			+1	For 800 Amp	ere Cut-Ou	uts			
91177	650	111/2	1	10	45 lbs.	\$12.00	\$18.72	\$4 00	\$6.24
91178	700	111/2	1	10	45 lbs.	12.00	18.72	4.00	6.24
91179	750	111/2	i	10	45 lbs.	12.00	18.72	4.00	6.24
91180	800	111/2	ī	10	45 lbs.	12 00	18.72	4.00	6.24
			<b></b>	or 1000 Am	Cut O				
			· · ·	or toou Am	pere Cut-U	u68			
91181	850	125/8	1	10	60 lbs.	\$15.00	\$23.40	\$5.00	\$7.80
91182	900	$12\frac{5}{8}$	1	10	60 lbs.	15 00	23.40	5.00	7.80
91183	950	125/8	1	10	60 lbs.	15.00	23.40	5.00	7.80
91184	1000	$12\frac{5}{8}$	1	10	60 lbs.	15.00	23 40	5.00	7.80
*Un	derwriters'	published	approval	only include	s up to 600	amperes.	•		

<sup>\*</sup>Underwriters' published approval only includes up to 600 amperes.

#### Refilled Fuses

NATIONAL ELECTRICAL CODE STANDARD



Construction of Fuses from 3 to 60 Amperes

## 3 to 60 Amperes, 600 Volts

List No.	Ampere Capacity	Length Inches	Carton Quantity	Std. Pkg. Quantity	Pkg. Net Wt.	Mfrs. List Each	List Price Each	Reload Price Each
		·	For 30	Ampere Cu	t-Outs			
28084 28085 28086 28087 28088 28089 28090 28091 28092 28093 28094 28095 28096	3 4 5 6 7 8 9 10 12 15 20 25 30	555555555555555555555555555555555555555	10 10 10 10 10 10 10 10 10 10 10 10	100 100 100 100 100 100 100 100 100 100	14 lbs. 14 lbs. 14 lbs. 14 lbs. 14 lbs. 14 lbs. 14 lbs. 14 lbs. 14 lbs. 14 lbs. 14 lbs. 14 lbs. 14 lbs. 14 lbs. 14 lbs. 14 lbs.	\$0.40 .40 .40 .40 .40 .40 .40 .40 .40 .40	\$0.57 .57 .57 .57 .57 .57 .57 .57 .57 .57	NOT REFILLABLE
		<u>.</u>	For 60	Ampere Cu	t-Outs			·
28097 28098 28099 28100 28101 28102	35 40 45 50 55 60	51/2 51/2 51/2 51/2 51/2 51/2	10 · 10 10 10 10 10	100 100 100 100 100 100	22 lbs. 22 lbs. 22 lbs. 22 lbs. 22 lbs. 22 lbs. 22 lbs.	\$0.60 .60 .60 .60 .60	\$0.86 .86 .86 .86 .86	NOT REFILL- ABLE



Construction of Fuses from 65 to 100 Amperes

## 65 to 100 Amperes, 600 Volts

List No.	Ampere Capacity	Length Inches	Carton Quantity	Std. Pkg. Quantity	Pkg. Net Wt.	Mfrs. List Each	List Price Each	Reload Price Each		
For 100 Ampere Cut-Outs										
28103 28104 28105 28106 28107 28108 28109 28110	65 70 75 80 85 90 95	77/8 77/8 77/8 77/8 77/8 77/8 77/8	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	50 50 50 50 50 50 50 50 50	23 lbs. 23 lbs. 23 lbs. 23 lbs. 23 lbs. 23 lbs. 23 lbs. 23 lbs.	\$1.50 1.50 1.50 1.50 1.50 1.50 1.50	\$2.16 2.16 2.16 2.16 2.16 2.16 2.16 2.16	\$1.15 1.15 1.15 1.15 1.15 1.15 1.15 1.15		

#### Refilled Fuses

NATIONAL ELECTRICAL CODE STANDARD



Construction of Fuses from 110 to 1000 Amperes

## 110 to 1000 Amperes, 600 Volts

List No.	Ampere Capacity	Length Inches	Carton Quantity	Std. Pkg. Quantity	Pkg. Net Wt.	Mfrs. List Each	Mfrs. Relo <b>ad</b> Each	W. E. List Each	W. E Reload Ead
			For 200 A	mpere C	ut-Outs		_		
28111	110	95/8	5	25	34 lbs.	\$2.50	\$1.20	\$3.60	\$1.7
28112	120	95%	5	25	34 lbs.	2.50	1.20	3.60	1.7
28113	125	958 958	5	25	34 lbs.	2.50	1.20	3.60	1.7
28114	150	9%	5	25	34 lbs.	2.50	1.20	3.60	1.7
28115 28116	175 200	95/8 95/8	5 5	25 25	34 lbs. 34 lbs.	2.50 2.50	1.20 1.20	3.60 3.60	1.7 1.7
<del></del>		1	For 400 A	mpere C	ut-Outs		1		!
8117	225	115/8	1 1	25	77 lbs.	<b>\$</b> 5. <b>5</b> 0	\$2.00	\$7.92	\$2.8
28118	250	115%	i	25	77 lbs.	5.50	2.00	7.92	2.8
28119	275	115/8	1	25	77 lbs.	5.50	2.00	7.92	2 8
28120	300	115/8	1	25	77 lbs.	5.50	2.00	7. <b>92</b>	2.8
28121	325	115/8	1	25	77 lbs.	5.50	2.00	7.92	2.8
28122	350	115/8	1	25	77 lbs.	5.50	2.00	7.92	2.8
28123 28124	375 400	115/8	1 1	25	77 lbs.	5.50 5.50	2.00	7.92	2.8
	400	115/8	<u> </u>	25	77 lbs.	0.00	2.00	7.92	2.8
			*For 600	Ampere C	Cut-Outs	3			
28125	450	1338	1	10	49 lbs.	\$8.00	\$3.00	\$11.52	\$4.3
28126	500	1338	1	10	49 lbs.	8.00	3.00	11.52	4.3
2812 <b>7</b> 281 <b>28</b>	550 600	133/8	1 1	10 10	49 lbs.	8.00	3.00	11.52	4.3 4.3
	000	13%8	1	10	49 lbs.	8.00	3.00	11.52	4.3
			*For 800	Ampere (	Cut-Out	•			
28129	650	141/2	1	10	60 lbs.	\$15.00	\$5.00	\$23.40	\$7.8
28130	700	141/2	1	10	60 lbs.	15.00	5.00	23.40	7.8
28131	750	141/2	1	10	60 lbs.	15 00	5.00	23.40	7.8
28132	800	14 1/2	1	- 10	60 lbs.	15.00	5.00	23.40	7.8
			*For 1000	Ampere (	Cut-Out	• .			
28133	850	155/8	1	10	75 lbs.	\$18.00	\$6.00	\$28.08	\$9.3
28134	900	155/8	1	10	75 lbs.	18.00	6.00	28.08	9.3
20196	l 950	155/8	1	10	75 lbs.	18.00	6.00	<b>28</b> . 08	9.3
28135 28136	1000	155/8	1	10	75 lbs.	18.00	6.00	28.08	9.3

<sup>\*</sup>Underwriters' published approval only includes up to 400 Amperes.

#### Refilled Fuses

# Western Electric "D & W" PROTECTORS







Mfr. No. 3104



Mfr. No. 3105

## Fire Alarm Protectors Combination Cut-outs furnished complete with fuses and sneak coils.

List No.	Description	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	*List Price Each
3100	Single Pole Cut-Out	50	42	\$0.50	\$0.66
3102	Single Pole Combination Cut-Out	50	54	1.10	1.46
3104	Double Pole Combination Cut-Out	50	101	1.75	2.32
3105	D. P. Comb. Cut-Out with Arrester without Sneak Coils.	50	100	1.40	1.84

FIRE ALARM FUSES—2000 VOLTS

		Type A—Screw	Claimp Contac			
List No.	Ampere Capacity	Centres Inches	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	*List Price Each
3001	1 Ampere 2 Ampere 3 Ampere 4 Ampere	$\begin{array}{c} 5\frac{5}{32} \\ 5\frac{5}{32} \\ 5\frac{5}{32} \\ 5\frac{5}{32} \\ 5\frac{5}{32} \end{array}$	100 100 100 100	1½ lbs. 1½ lbs. 1½ lbs. 1½ lbs.	\$0.20 .20 .20 .20	\$0.27 .27 .27 .27
102		SNEAK	COILS			

For Combination Cut-Out ½ lb. ½ lb. 100 \$0.18 Ampere .24 .18 100 3210 . . Ampere 1/2 lb. 1/2 lb. 1/2 lb. 1/2 lb. 100 .18 3310..... 3 Ampere .18 24 100 3410..... Ampere .24 100 .18 5 Ampere

For telephone service we recommend a 3 ampere sneak coil, and for fire alarm service a 5 ampere sneak coil.



Mfr. No. 2753



Mfr. No. 2757

# Telegraph Protectors Without Fuses

List No.	Туре	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	*List Price Each
2750	Western Union S. P. without Lightning Arrester	50	24 lbs.	\$0.30	\$0.40
2751	Western Union D. P. without Lightning Arrester	50	48 lbs.	.50	.66
2752	Western Union S. P. with Lightning Arrester	50	25 lbs.	.60	.79
2753	Western Union D. P. with Lightning Arrester	50	50 lbs.	1.00	1.32
2754	Postal Type A. S. P. without Lightning Arrester	50	43 lbs.	.40	.53
2755	Postal Type C, S. P. without Lightning Arrester	50	43 lbs.	.40	.53
2756	Postal Type A, S. P. with Lightning Arrester	50	52 lbs.	.75	.99
2757	Postal Type C, S. P. with Lightning Arrester	50	52 lbs.	.75	.99

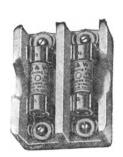
TELEGRAPH FUSES
For Telegraph Protectors

List No.	Ampere Capacity	For Cut-Outs	Length Inches	Centres Inches	Std. Pkg.	Pkg. Wt.	Mfrs. List Each	*List Price Each
2760	0- 5 0-10	West. Un. Postal	45/8 45/8		100 100	3 lbs. 7 lbs.	\$0.20	\$0.27
2761 2762	0-10	Postal	478	5 8 2	100	7 lbs.	20	.27

Delivery F. O. B. Factory, Providence, R. I. For warehouse deliveries write nearest house.

## "D & W" ENCLOSED FUSE CUT-OUTS

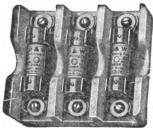
NATIONAL ELECTRICAL CODE STANDARD







List No. 91104



List No. 91103



List No. 91117

#### 0 to 100 Amperes, 250 Volts Porcelain

List No.	Ampere Capacity	Description Contact	Std. Pkg.	Pkg. Net Wt.	Mfrs. List Each	W. E. List Each
91101	0- 30	Single Pole, Main Line, porc Ferrule	50	13	\$0.40	\$0.58
91107	31- 60	Single Pole, Main Line, porc Ferrule	50	30	.65	.94
91114	61-100	Single Pole, Main Line, porcKnife Blade	50	79	1.40	2.02
91102	0- 30	Double Pole, Main Line, porc Ferrule	50	37	.55	.79
91108	31- 60	Double Pole, Main Line, porc Ferrule	50	81	1.40	2.02
91119	61-100	Double Pole, Main Line, porc Knife Blade	50	156	2.80	4.04
91104	0- 30	Double Pole, Single Branch, porc Ferrule	50	60	.70	1.01
91110	31- 60	Double Pole, Single Branch, porc Ferrule	50	121	1.75	2.52
91106	0- 30	Double Pole, Double Branch, porc Ferrule	25	50	1.30	1.87
91113	31- 60	Double Pole, Double Branch, porc Ferrule	25	134	3.50	5.04
91103	0- 30	Triple Pole, Main Line, porc Ferrule	50	51	.80	1.15
91109	31- 60	Triple Pole, Main Line, porc Ferrule	50	117	2.00	2.88
91120	61-100	Triple Pole, Main Line, porc Knife Blade	25	117	4.00	5.76
91105	0- 30	Triple Pole, Single Branch, porc Ferrule	50	90	1.35	1.94
91111	31- 60	Triple Pole, Single Branch, porc Ferrule	50	250	3.00	4.32
91100	0- 30	Triple Pole, Double Branch, porc Ferrule	25	91	2.25	3.24
91123	31- 60	Triple Pole, Double Branch, porc Ferrule	10	95	6.00	8.64
91121	0- 30	3 to 2 Wire, Double Branch, porc Ferrule	25	65	1.50	2.16
91124	31- 60	3 to 2 Wire, Double Branch, porc Ferrule	25	158	4.20	6.04
91122	0- 30	2 Wire Cross-over Branch, porc Ferrule	50	53	,65	.94

#### 101 to 1000 Amperes, 250 Volts Slate Base

91115	101-200   Single Pole, Main Line, Slate   Knife Blade	25	84	\$2.10	\$3.02
91117	201-400 Single Pole, Main Line, SlateKnife Blade	25	138	5.25	7.56
91118	401-600 Single Pole, Main Line, SlateKnife Blade	10	93	7.20	10.36
91190	*601-800 Single Pole, Main Line, SlateKnife Blade	10	175	20.00	31.20
<b>9</b> 1191	*801-1000 Single Pole, Main Line, Slate Knife Blade	10	200	25.00	39.00

Underwriters' published approval only includes up to 600 amperes.



# For High Tension Work

In the "D & W" Cut-out the fusible element is placed under a heavy body of special oil. The cutouts are made in three capacities, of 50, 100 and 200 ampere, 2500 volt capacity. Special precautions have been taken to so design the device as to render re-fusing safe for the operator. The cut-out is not intended for use as a switching device. The fusible element is light and readily inserted.

Oil Fuse Cut-outs

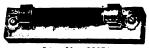
	•	DIDO T
List No.		Each
542196	50 ampere, oil fuse cut-out pole type	\$20.00
542197	100 ampere, oil fuse cut-out pole type	30.00
542198	200 ampere, oil fuse cut-out pole type	40.00
542199	50 ampere, capacity fuse	\$0.60
542200	100 ampere, capacity fuse	1:00
542201	200 ampere, capacity fuse	2.40

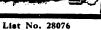
Delivery F. O. B. Factory, Providence, R. I. For warehouse deliveries write nearest house.

## Western Electric

## "D & W" CUT-OUTS

NATIONAL ELECTRICAL CODE STANDARD







List No. 28078

## 0 to 100 Amperes, 600 Volts

#### Ferrule Contact-Single Pole Porcelain

List No.	Ampere Capacity	Standard Package	Package Net Weight	Mfrs. List Each	W. E. List Each
28076 Without barrier 28077 Without barrier 28074 With barrier	0-30 31-60 0-30 31-60	50 50 50 50	48 lbs. 54 lbs. 48 lbs. 54 lbs.	\$0.60 .90 .60	\$0.96 1.44 .96 1.44

	Knife-Blade	Contact—Single P	ole Porcelain		
28078	61–100	50	102 lbs.	\$1.75	\$2.80

## 101 to 1000 Amperes, 600 Volts

#### Knife-Blade Contact-Single Pole Slate

List No.	Ampere Capacity	Standard Package	Package Net Weight	Mfrs. List Each	W. E. List Each
28079	101- 200	25	106 lbs.	\$2.30	\$3.68
28080 28081	201- 400 *401- 600	25	181 lbs. 108 lbs.	6.00 7.80	9.60 12.48
28140	*601- 800	10	250 lbs.	21.00	33.60
28141	*801-1000	10	275 lbs.	26.00	41.60

<sup>\*</sup>Underwriters' published approval only includes up to 400 amperes.



List No. 60100



List No. 60123

## 0 to 100 Amperes, 2500 Volts

#### Knife-Blade Contact

List No.	Ampere Capacity	Description	Std. Pkg.	Pkg. Net Wt.	Mfrs. List Each	W. E. List Eách
60030 60060 60100	0- 30 31- 60 60-100	Single Pole Slate	25	81 lbs. 86 lbs. 91 lbs.	\$2.25 2.50 2.75	\$3.60 4.00 4.40

#### 4400-22000 Volt Cut-Cuts

#### Knife-Blade Contact

List No.	Description	Std. Pkg.	Pkg. Net Wt.	Mfrs. List Each	W. E. List Each
60120	0-20 Amperes, 4400 Volts Marble Base	10		\$15.00	\$19.80
60121	0-15 Amperes, 6600 Volts Marble Base	10		15.00	19.80
60122	0-10 Amperes, 13200 Volts Marble Base			16.00	21.12
60123	0- 5 Amperes, 22000 Volts Marble Base	10 igiti	zed by 🔾	10 (16200°	21.12

## "D & W" HIGH TENSION FUSES

Knife-Blade Contact





List No. 6030

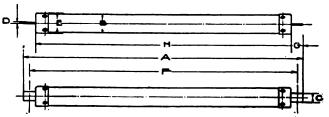
List No. 60113

## 3-100 Amperes, 2500 Volts

			For 30	Ampere Cu	t-Outs			
List No.	Ampere Capacity	Length Inches	Std. Pkg.	Net Pkg.	Mfrs. List Each	W. E. List Each	Mfrs. Reload Each	W E Reload Each
6003	3	10	50	28 lbs.	\$1.50	\$2.34	\$1.10	\$1.72
6004	4	10	50	28 lbs.	1.50	2.34	1.10	1.72
6005	5	10	50	28 lbs.	1.50	2.34	1.10	1.72
6006	6	10	50	28 lbs.	1.50	2.34	1.10	1.72
6007	7	10	50	28 lbs.	1.50	2 34	1.10	1.72
6008	8	10	50	28 lbs.	1.50	2.34	1.10	1.72
6009	9	10	50	28 lbs.	1.50	2.34	1.10	1.72
6010	10	10	50	28 lbs.	1.50	2.34	1.10	1.72
6012	12	10	50	. 28 lbs.	1.50	2.34	1.10	1.72
6015	15	10	50	28 lbs.	1.50	2.34	1.10	1.72
6020	20	10	50	28 lbs.	1.50	2.34	1.10	1.72
6025	25	10	50	28 lbs.	1.50	2.34	1.10	1.72
6030	30	10	50	28 lbs.	1.50	2.34	1.10	1.72
			For 60 A	Ampere Cu				
6035	35	101/2	25	30 lbs.	\$2.00	\$3.12	\$1.30	\$2.02
6040	40	101/2	25	30 lbs.	2.00	3.12	1.30	2.0
6045	45	101/2	25	30 lbs.	2.00	3.12	1.30	2.0
6050	50	101/2	25	30 lbs.	2 00	3.12	1.30	2.0
6055	55	101/2	25	30 lbs.	2.00	3.12	1.30	2.0
6060	60	101/2	25	· 30 lbs.	2.00	3.12	1.30	2.02
			For 100	Ampere Cu	it-Outs	·····		
6065	65	11	25	42 lbs.	\$3.00	\$4.68	\$1.60	\$2.50
6070	70	11	25	42 lbs.	3.00	4.68	1.60	2.50
6075	75	11	25	42 lbs.	3.00	4.68	1.60	2.5
6080	80	īī	25	42 lbs.	3.00	4.68	1.60	2.5
6085	85	11	25	42 lbs.	3.00	4.68	1.60	2.5
6090	90	īī	25	42 lbs.	3.00	4.68	1.60	2.5
6095	95	jī	25	42 lbs.	3.00	4.68	1.60	2.5
6100	100	ji	25	42 lbs.	3.00	4.68	1 60	2.5

# Fuses 4400-22000 Volts Knife-Blade Contact

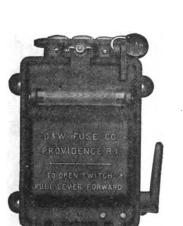
List No.	Ampere Capacity	Volts	For Cut-Outs	Length Inches	Std. Pkg.	Mfrs. List Each	W. E. List Each	Mfrs. Reload Each	W. E. Relead Each
60110	0-20	4400	60120	14	25	\$3.50	\$4.62	\$2.50	\$3.30
60111	0-15	6600	60121	17	25	4.00	5.28	2.75	3.64
60112	0-10	13200	60122	20	10	4.50	5.94	3.00	3.96
60113	0- 5	22000	60123	23	10	5.00	6.60	3.50	4.62



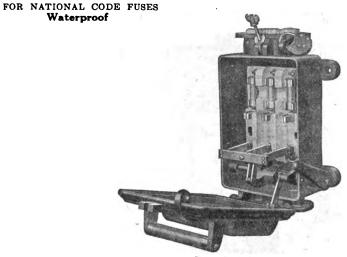
#### Standard Dimensions

Volts	Amps.	A	В	С	D	E	F	G	Н
4400 6600 13200 22000	1-20 1-15 1-10 1- 5	14 17 20 23	13/4 13/4 13/4 11/2	3/4 3/4 3/4	1/8 1/8 1/8 1/8	17/8 17/8 17/8 17/8 Dillington	13 16 19 22	1 1 g[a	12 15 18 21

#### "D & W" FUSED SWITCH BOXES





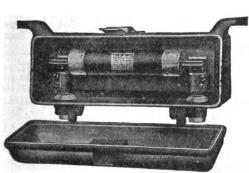


Type J-28 Open

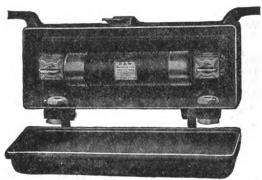
#### Waterproof Fused Switch Boxes 250 Volts

List No.	Туре	Description	Net Wt. Each	*List Price Each
25075	J-25	0-30 Amperes, Double Pole	18 lbs.	\$10.30
25076	J-26	31-60 Amperes, Double Pole	26 lbs.	20.60
25077	J-27	61-100 Amperes, Double Pole	35 lbs.	47.52
25078	J-28	0-30 Amperes, Triple Pole	20 lbs.	19.00
25079	J-29	31-60 Amperes, Triple Pole	30 lbs.	31.68
25080	· J-30	61-100 Amperes, Triple Pole	40 lbs.	63.36

The above prices do not include fuse or padlock.



Mfr. No. 60128



Mfr. No. 60129

## "D & W" Railway Cut-Outs

Car Type-600 Volts

These Cut-outs consist of an asbestos-lined iron case with hinged cover, held in place by a spring catch.

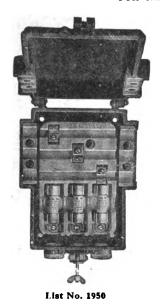
List No.	Type	Description	Length of Fuse	Pkg. Quantity	Pkg. Net Wt.	*List Price Each
60128	R-5	Car Motor Cut-out for N. E. Code Std. fuses 61 to 100 amperes, 600 volts	7 % ins.	25	225 lbs.	\$8.92
60129	R-6	Car Motor Cut-out for N. E. Code Std. fuses bolted, 101 to 200 amperes, 600 volts	. , 0		369 lbs.	12.22

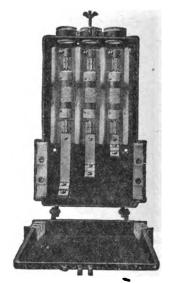
Nors: Type R-5 box can be fitted with screw clamp contacts, and Type R-6 with knife-blade contacts if desired. In ordering fuses for boxes specify the type of box.

\*Delivery F. O. B. Factory, Providence, R. I. For warehouse deliveries write nearest house.

## "D & W" BRANCH BOXES AND OUTLET HOODS

FOR NATIONAL CODE FUSES-250 VOLTS





List No. 1952

#### Triple Pole Single Branch

In the use of the branch boxes we would call particular attention to the split bushings mounted in the covers and boxes, which permit of the necessary connections without any break in the wiring, thereby greatly reducing the cost of installation. These boxes are not ordinarily gasketted, but can be so furnished if desired.

List No.	Туре	Description	Std. Pkg.	Pkg. Net Wt.	*List Price Each
1950 1951 1952	JB-1 JB-2 JB-3	3- 30 Amperes, T. P. S. B	25	188 lbs. 380 lbs. 540 lbs.	

## "D & W" Outlet Hoods

#### For Above Branch Boxes

List. No.	Туре	Description	Std. Pkg.	Pkg. Net Wt.	*List Price Each
1970	JB-1 JB-1 JB-2 JB-2 JB-3 JB-3	End Connection Side Connection End Connection Side Connection End Connection End Connection Side Connection	25 50 25 50 25 50	81 lbs. 162 lbs. 113 lbs. 225 lbs. 163 lbs. 325 lbs.	\$1.32 1.32 1.58 1.58 2.18 2.18

## "D & W" SERVICE SWITCHES AND FUSE BOXES

FOR NATIONAL CODE FUSES

#### Waterproof







No. 1906 Switch for Multiphase Circuit



No. 2205 Fuse Box



No. 2208 Fuse Box

The service switch is constructed for use both as a cut-out and a switch. It consists of a set of enclosed fuses mounted in an iron box so that they can be made to swing with the cover and open the circuit or to remain in the fuse clip while the cover is open. The fuse box is a device similar to the service switch except that the cover is not provided with any mechanism for withdrawing the fuses from the circuit. They are so designed as to be used on the outside of buildings or in cellars where the wires enter from the subway. In the covers of the service switches are mounted the fuse guides to positively align the fuses in order that the boxes may be readily closed with the fuses properly engaging in the cut-outs. Withdrawal hooks are also mounted in the cover. These grasp the fuses when the levers outside the boxes are given a one-quarter turn. Thus the fuses can be withdrawn from the circuit if desired when the boxes are opened.

## "D & W" Service Switches, 250 Volts

List No.	Туре	Ampere Capacity	Poles	Std. Pkg.	Pkg. Net Wt.	*List Price Each
1910	I-6	/ 0- 30	2	25	175 lbs.	\$9.58
1900	I-7	31- 60	2	25	225 lbs.	10.90
1901	I-8	61-100	2	25	450 lbs.	16.50
1902	I-9	101-200	2	20	560 lbs.	27.06
1903	I-10	201-400	2	20	920 lbs.	55.44
1904	I-11	401-600	2	10	680 lbs.	92.40
1911	I-0	0- 30	3	. 25	218 lbs.	11.88
1905	I	31- 60	3	25	275 lbs.	13.20
1906	I-2	61-100	3	25	550 lbs.	19.80
1907	I-3	101-200	3	20	680 lbs.	34.32
1908	I-4	201-400	3	20	1140 lbs.	73.92
1909	I-5	401-600	3	10	880 lbs.	126.72

Note: For D. C. Three-Wire Circuits these boxes are equipped with two hooks operated by individual levers, and for Multiple Circuits with three hooks operated simultaneously by one lever. Unless otherwise specified, boxes for D. C. circuits will be shipped.

## "D & W" Fuse Boxes, 250 Volts

List No.	Туре	Ampere Capacity	Poles	Std. Pkg.	Pkg. Net Wt.	*List Price Each
2210	K-19	0- 30	2	25	150 lbs.	\$6.60
2200	K-20	31- 60	2	25	190 lbs.	8.44
2201	K-21	61-100	2	25	380 lbs.	10.90
2202	K-22	101-200	2	20	475 lbs.	23.10
2203	K-23	201-400	2	20	780 lbs.	46.20
2204	K-24	401-600	2	10	580 lbs.	69.30
2211	K-25	0- 30	3	25	190 lbs.	8.58
2205	K-26	31- 60	3	25	235 lbs.	10.56
2206	K-27	61-100	3	25	470 lbs.	14.52
2207	K-28	101-200	3	20	580 lbs.	31.68
2208	K-29	201-400	3	20	970 lbs.	62.70
2209	K-30	401-690	3	10	748 lbs.	101.64

<sup>\*</sup>Delivery F. O. B. Factory, Providence, R. I. For warehouse deliveries write nearest house.

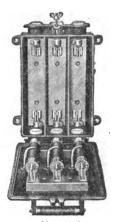
#### "D & W" SERVICE SWITCHES AND FUSE BOXES

FOR NATIONAL CODE FUSES

#### Waterproof



No. 1811 Service Switch



No. 1819 Service Switch



No. 1831 Fuse Box



No. 1839 Fuse Box

The service switch is constructed for use both as a cut-out and a switch. It consists of a set of enclosed fuses mounted in an iron box so that they can be made to swing with the cover and open the circuit or to remain in the fuse clip while the cover is open. The fuse box is a device similar to the service switch except that the cover is not provided with any mechanism for withdrawing the fuses from the circuit. They are so designed as to be used on the outside of buildings or in cellars where the wires enter from the subway. In the covers of the service switches are mounted the fuse guides to positively align the fuses in order that the boxes may be readily closed with the fuses properly engaging in the cut-outs. Withdrawal hooks are also mounted in the cover. These grasp the fuses when the levers outside the boxes are given a one-quarter turn. Thus the fuses can be withdrawn from the circuit if desired when the boxes are opened.

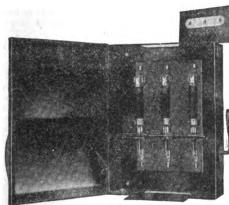
## "D & W" Service Switches, 600 Volts

List No.	Туре	Ampere Capacity	Poles	Std. Pkg.	Pkg. Net Wt.	*List Price Each
1811	0	0- 30	2	25	300 lbs.	\$10.90
1812	O-2	31- 60	2	25	362 lbs.	13.20
1813	0-3	61-100	2	25	500 lbs.	23.10
1814	0-4	101-200	2	20	600 lbs.	46.20
1815	0-5 .	201-400	2	20	1000 lbs.	105.60
1816	O-6	401-600	2	10	818 lbs.	175.56
1817	O-7 .	0- 30	3	25	400 lbs.	13.20
1818	0-8	31- 60	3	25	432 lbs.	15.84
1819	O-9	61-100	3	25	732 lbs.	30.36
1820	0-10	101-200	3	20	928 lbs.	55.44
1821	0-11	201-400	3	20	1840 lbs.	134.64
1822	0-12	401-600	3	10	1168 lbs.	231.00

## "D & W" Fuse Boxes, 600 Volts

List No.	Туре	Ampere Capacity	Poles	Std. Pkg.	Pkg. Net Wt.	*List Price Each
1831	L	0- 30	2	25	262 lbs.	\$7.92
1832	L-2	31- 60	2	25	325 lbs.	9.90
1833	L-3	61-100	2	25	450 l <b>bs.</b>	21.12
1834	L-4	101-200	2	20	560 lbs.	36.96
1835	L-5	201-400	2	20	950 lbs.	83.16
1836	L-6	401-600	2	10	785 lbs.	132.00
1837	I_7	0- 30	3	25	344 lbs.	10.56
1838	L-8	31- 60	3	25	388 lbs.	12.54
1839	L-9	61-100	3	25	672 lbs.	26.40
1840	L-10	101-200	3	20	870 lbs.	55.44
1841	L-11	201-400	3	20	1760 lbs.	110.88
1842	L-12	401-600	3	10	1112 lbs.	180.84

## "SQUARE D" STEEL ENCLOSED SWITCHES



Blades Opening at the Same Time .

## Description

"Square D" Steel Enclosed Switches are designed for use n consquare of Steel Enclosed Switches are designed for use a con-nection with installations whenever it is desirable to completely enclose all terminal wires and live parts for the advancement of "Safety First" principles, standardization of equipment, the preven-tion of tampering with circuits and the elimination of accident

The switch and cutout unit are completely enclosed in a sheet steel box provided with a hinged cover which is held closed with a simple spring catch. The switch is operated by a crank handle located outside the box. The switch may be locked in the "off" position to prevent accidents while repairs are made on apparatus controlled by the switch, or may be locked in the "off" position permanently, if it is desired that the apparatus be not used.

Means are also provided to seal the cover shut to prevent unauthorized persons over-fusing the switch or tampering with live connections.

All "Squar I "Stee! Enclosed Fused Switches of over 30 ampere capacity for circuits of more than 250 volts are of the quick break type, and are designed for the use of enclosed fuses—Edison Plug type.

Fig. 3. No. 5342, 3 Pole, 60 Amp., 500 Volts, A.C. for 125 volt switches and National Electrical Code Standard Cartridge Fuses for 250 volts A.C. or D.C., 500 volts A.C. and 600 volts A.C. or break Mechanism in These Switches Insures Al. D.C. Spacing for live metal parts are as given in the National Electrical Code.

#### CONVENIENCE

Removable and interchangeable end plates are provided.

These plates are furnished blank, with knockouts, or with porcelain outlet covers, according to installation requirements. Convenient knockouts are furnished in sides of boxes.

All boxes are designed so that ample wiring space is provided inside to make the necessary connections.

"Square D" Cabinets are constructed of sheet steel.

Corners are electrically welded.

The crossbar attached to switch blades is of steel, heavily insulated, and will not warp or bend. Switch and cutout unit is mounted complete within the box, ready for immediate installation.



Fig. 5. No. 5351



Fig. 4. Nos. 5211E and 5251X. Switch "Locked Off"

## "Square D" Steel Enclosed and Service Switches

BEAR UNDERWRITERS' FIRE AND ACCIDENT LABEL

The Underwriters' Laboratories, Inc., have inaugurated a new label service called the Casualty Label Service.

The most prominent casualty insurance companies who insure under employers' liability and workmen's compensation acts, are subscribers to the merit classification service and accident prevention inspection of the Workmen's Compensation

Devices labeled with the Underwriters' Fire and Accident label are not subject to charge under the analytic schedule of the Workmen's Compensation Service Bureau, but devices without this label may be responsible for a much higher rate.

The factory has been manufacturing enclosed electrical switches and motor starters for several years. It has always advocated the complete housing of all live metal parts in electrical installations, realizing the danger of exposed live parts, both from fire and accident standpoints. When it learned that the Underwriters' Laboratories, working together with the Workmen's Compensation Service Bureau, were to inaugurate this new label service, it at once submitted its devices for examination and approval.

After several months' severe examination and tests, it was given permission, in May, 1915, to use the new fire and accident label on its enclosed electrical switches. Its switches were the first to be given this "safety" label privilege.

The labels are serially numbered. No. 1 was issued to that company. Their products now bearing the Underwriters' Fire and Accident label are "Square D" Steel Enclosed Service Switches, Ironclad Induction Motor Starters and Ironclad Switches.

This significant action on the part of the Underwriters' Laboratories shows to what extent they regard the importance of enclosing all live metal parts of electrical installations.

# "SQUARE D" STEEL ENCLOSED SWITCHES and Steel Enclosed Service Switches

"Square D" boxes are made with openings at each end in which end plates are to be inserted to meet any desired wiring requirements and it is necessary to order end plates with each box to have the device complete.

All "Square D" Steel Enclosed Switches and end plates are divided into three classes, A, B and C, according to the depth of boxes in which switch and cutout are mounted.

Class A boxes are 3 ins. deep and end plates to fit ends of Class A boxes are listed as Class A end plates. Class B boxes are 4 ins. deep and end plates to fit ends of Class B boxes are listed as Class B end plates. Class C boxes are 5 ins. deep and end plates to fit ends of Class C boxes are listed as Class C end plates. When ordering switches be sure to specify the list numbers of end plates wanted. If end plates are not

When ordering switches be sure to specify the list numbers of end plates wanted. If end plates are not specified and unless definite instructions are given NOT to furnish switches complete with end plates we will ship and bill end plates suitable for use with switches ordered.

When the National Electrical Code was amended to read so that if a knife blade switch were mounted in an approved box, the switch could be ahead of the cutout, we changed the design of "Square D" switches from fused top to fused bottom.

When our stock of fused top switches is exhausted no more of this type will be made.

List prices for fused bottom switches are the same as for fused top switches of the same capacities.

125 VOLTS							
		For Ed	ison Plug	Fuses at To	p		
List				Depth	End Plates		List Price
No.			Amperes	of Box	to Fit	Weight	Each
5211E	Double pole		30	3 ins.	Class A	$5\frac{1}{2}$ lbs.	<b>\$4</b> . 67
*5211B	Double pole		30	3 ins.	Class A	6 lbs.	4.93
5311E	Triple pole.		30	3 ins.	Class A	7 lbs.	7.80
*5311B	Triple pole.		30	3 ins.	Class A	8½ lbs.	8.40
5411E	Four pole		30	3 ins.	Class A	11 lbs.	9.73
*5411B	Four pole		30	3 ins.	Class A	12 lbs.	10.20
*With	h single branc	h connections at top	of cutout	base.			
List No.	List						
Fused	No.		250 VC				
Bottom	Fused Top	For N	N. E. C. S	. Fuses at To	<b>p</b>		
	5251X	Double pole	30	3 ins.	Class A	6 lbs.	<b>\$</b> 5.93
56252	5252	Double pole	60	4 ins.	Class B	1134 lbs.	15.68
56253	5253	Double pole	100	4 ins.	Class B	21¼ lbs.	24.98
56254	5254	Double pole	200	5 ins.	Class C	41 lbs.	40.80
56255		Double pole	400	5 ins.	Class C	80 lbs.	61.86
	5351X	Triple pole	30	3 ins.	Class A	8 lbs.	10.28
56352	5352	Triple pole	60	4 ins.	Class B	20 lbs.	21.60
56353	<b>5</b> 353		100	4 ins.	Class B	30 lbs.	32.40
	5354	Triple pole	200			58 lbs.	56.25
56354		Triple pole		5 ins.	Class C		90.00
56355	EASIV	Triple pole	400	5 ins.	Class C	95 lbs.	
50450	5451X	Four pole	30	3 ins.	Class A	12 lbs.	12.45
56452	5452	Four pole	60	4 ins.	Class B	25 lbs.	28.05
56453	5453	Four pole	100	5 ins.	Class C	<u>51</u> lbs.	47.55
56454		Four pole	200	5 ins.	Class C	77 lbs.	76.88
56455		Four pole	400	5 ins.	Class C	120 lbs.	110.25
			500 VOLT	7 A 27			
				Fuses at Top			
50041	PO 41					00 11	<b>900 FE</b>
56341	5341	Triple pole	30	4 ins.	Class B	22 lbs.	\$20.55
56342	5342	Triple pole	60	4 ins.	Class B	23 lbs.	22.95
56343	5343 •	Triple pole	100	4 ins.	Class B	$32\frac{1}{4}$ lbs.	34.80
56441	5441	Four pole	30	4 ins.	Class B	32 lbs.	27.30
56442	5442	Four pole	60	<b>4</b> ins.	Class B	33 lbs.	30.75
<b>56443</b>	5443	Four pole	100	5 ins.	Class C	56 lbs.	51.00
			600 VC	I.TS			
		For N.		Fuses at Tor	•		
E0061	E061			-		21 lbs.	<b>6</b> 00 05
56261	5261	Double pole	30	4 ins.	Class B		\$20.25
56262	5262	Double pole	60	4 ins.	Class B	21 lbs.	21.75
56263	5263	Double pole	100	5 ins.	Class C	42 lbs.	34.95
56264	<b>5264</b>	Double pole	200	5 ins.	Class C	62 lbs.	54.83
56265		Double pole	400	6 ins.	tSolid ends	135 lbs.	150.00
56361	5361	Triple pole	30	4 ins.	Class B	30 lbs.	26.19
56 <b>362</b>	<b>5362</b>	Triple pole	60	4 ins.	Class B	30 lbs.	28.5 <b>O</b>
56363	<b>53</b> 63	Triple pole	100	5 ins.	Class C	67 lbs.	47.25
56364	<b>53</b> 64	Triple pole	200	5 ins.	Class C	95 lbs.	76.28
<b>56365</b>		Triple pole	400	6 ins.	†Solid ends	160 lbs.	215.0 <b>O</b>
56461	5461	Four pole	30	4 ins.	Class B	37 lbs.	37.5 <b>O</b>
56462	<b>5462</b>	Four pole	60	4 ins.	Class B	40 lbs.	40.8 <b>O</b>
56463	5463	Four pole	100	5 ins.	Class C	83 lbs.	62.1 O
56464		Four pole	200	5 ins.	Class C	120 lbs.	359.50
56465		Four pole	400	6 ins.	tSolid ends	180 lbs.	252.00
D		3- 6	C		ii		annut of

Prices do not include fuses or end plates. Ground wire lug for grounding switch box furnished as part of regular equipment without charge. †We will drill to order ends of six-inch boxes at 25 cents list each per hole.

T :-4

#### STANDARD END PLATES

DETACHABLE AND INTERCHANGEABLE

End plates listed are divided into three classes, A, B and C, according to depth of "Square D" boxes for which they are designed.

designed.

Class A end plates are for use with Class A boxes (3 inches deep).

Class B end plates are for use with Class B boxes (4 inches deep).

Class C end plates are for use with Class C boxes (5 inches deep).

End plates for use in end openings of the "Square D" steel enclosed switch boxes are furnished as listed below; blank, or with knockouts for use with rigid conduit, or with multiple hole porcelain outlet covers for open wiring installations.











Class A End Plates

For Use with Class A Boxes (3 Inches Deep)

1801	Description  Blank 3 Knockouts for ½ in conduit	Carton Quantity 10 10	Carton Quantity 2½ lbs. 2½ lbs.	Price Each \$0.15
Clas	s A end plates are of sheet steel 4½ inches long by 3 inches wide.	10	273 100.	. 13

Open Wiring End Plates with Porcelain Outlet Covers For Use with Class A Boxes (3 Inches Deep)

List		Holes in	Porcelain	Carton	Wt. Carton	List Price
No.	Description	Number	Diameter	Quantity	Quantity	Each
1923	Open wiring	2	🛧 in.	10	3 lbs.	<b>\$0</b> .30
1924	Open wiring	3	🚠 in.	10	3 lbs.	.30
1925	Open wiring	4	👬 in.	10	3 lbs.	. 30
1926	Open wiring	5	🚠 in.	10	3 lbs.	.30
1939	Open wiring	2	% in.	10	8lbs.	. 30
1940	Open wiring	3	⅓ in.	10	3 lbs.	.30
1941	Open wiring	4	3% in.	10	3 lbs.	.30
1942	Open wiring	5	¾ in.	10	3 lbs.	.30
<b>CI</b>	- A					

Class A open wiring end plates are 4½ inches long by 3 inches wide.

All end plates listed under Class A will fit the opening in either end of Class A boxes (3 inches deep).







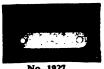


Class B End Plates For Use with Class B Boxes (4 Inches Deep)

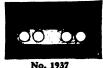
List No. 1802 1803 1804	Description  1 Knockout for ¾ in. conduit.  1 Knockout for 1 ¼ in. conduit.  1 Knockout for 1 ¼ in. conduit.  1 Knockout for 1 ½ in. conduit.	5 5	Wt. Carton Quantity 3 1/4 lbs. 3 1/4 lbs. 3 1/4 lbs.	List Price Each \$0.42 .42 .42
1805	1 Knockout for 1½ in. conduit	5	3 1/4 lbs.	.42
1806	Blank	5	3 ¼ lbs.	.42
1814	Adapter end plate	5	1 ⅓ lbs.	.33

Class B end plates are of sheet steel 6% inches long by 4 inches wide.

Above Class B end plates are furnished with screws to provide perfect ground connection between end plate and box.







No. 1927

Open Wiring End Plates with Porcelain Outlet Covers For Use with Class B Boxes (4 Inches Deep)

		For Ose with Class	D DOXES (4 Inches Dec	P)	List
'List		n Porcelain	Carton	Wt. Carton	Price
No.	Number	Diameter	Quantity	Quantity	Each
1927	2	3∕4 in.	5	4 lbs.	<b>\$0.</b> 80
1928	3	3/8 in.	Ā	4 lbs.	.80
1929	ă	% in.	5	4 lbs.	.80
1930	Ž	% in.	ř,	4 lbs.	.80
	ž		ž	4 lbs.	.80
1931	2	in.	Ş	4 lbs.	.80
1932	8	💑 in.	9		
1933	4	ytin.	5	4 lbs.	.80
1094	<i>f</i> 1	3% in. ∖	5	4 lbs.	.80
1934	14	<b>☆</b> in. (	3		•00
1935	`ā	¼ in.	δ	4 lbs.	.80
1936	3	12 in.	Ā	4 lbs.	.80
1937	Ž.	₩ in.	Ř	4 lbs.	.80
T 891	/3		Ū		
1938	₹ ‡	26 in. }	5	4 lbs.	.80
	14	% in. ∫	=	( ' 0 0 0	

Class B end plates are 6% inches long by 4 inches wide.

All end plates listed under Class B will fit openings in either end of Class B Boxes (4 inches deep).

## STANDARD END PLATES AND ACCESSORIES









Class C End Plates

#### For Use with Class C Boxes (5 Inches Deep)

List		Carton	Weight	List Price
No.	Description	Quantity	Carton Quantity	Each
181 <b>2</b>	1 knockout for 1½ ins. conduit	5	$4\frac{3}{4}$ lbs.	<b>\$0</b> .69
1813	1 knockout for 2 ins. conduit	5	43/4 lbs.	.69

Class C end plates are of sheet steel 8¼ inches long by 5 inches wide.

Above Class C end plates are furnished with screws to provide perfect ground connection between end plate and box.

## Open Wiring End Plates with Porcelain Covers

#### For Use with Class C Boxes (5 Inches Deep)

List	Holes i	n Porcelain	Carton	Weight	List Price
No.	No.	Diameter	Quantity	Carton Quantity	Each
1953	. <b>2</b>	3∕4 in.	5 :	$5\frac{1}{2}$ lbs.	\$1.08
1954	3	¾ in.	5	5½ lbs.	1.08
19 <b>5</b> 5	4	¾ in.	5	5⅓ lbs.	1.08
1956	$\begin{Bmatrix} 1 \\ 4 \end{Bmatrix}$	3⁄8 in. } 3∕4 in. }	5	5½ lbs.	1.08
1957	· ` <b>2</b>	l in.	5	7 lbs.	1.47
1958	3	1 in.	5	7 lbs.	1,47

Class C end plates are 8½ inches long by 5 inches wide. All end plates listed under Class C will fit the openings in either end of Class C boxes (5 inches deep).

## Porcelain Bushings

For Use in Conduit Knockout Openings















Illustration Shows Comparative Size of Bushings for Use with "Square D" Boxes. Reversed Bushing at Left Shows How Spring Wire Clamp Is Attached

List No.	Diameter Wire Hole	Outside Diameter of Shank	Equivalent Trade Size Conduit	Carton Quantity	Std. Pkg. Quantity	Wt. Std. Pkg.	List Price per C
399B	₩ in.	†† in.	}≰ in.	50	250	1214 lbs.	\$5.04
399D	n in.	it in.	½ in. ¼ in.	50 <b>2</b> 5	250 150	12½ lbs. 6 lbs.	5.04 8.10
399E	in.	i in.	12 in.	25	150	6 lbs.	8.10
399F	¼ in.	1 1/4 ins.	1 in.	25	100	6 lbs.	10.80
399G	11/2 ins.	15% ins.	11/2 ins.	25	50	5 lbs.	13.32

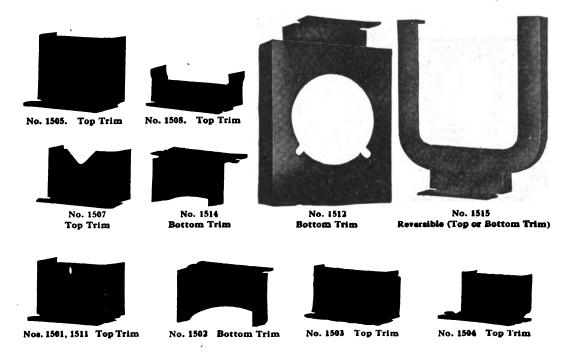
Porcelain bushings listed above are designed particularly for use with "Square D" steel enclosed switch boxes. They may be used, however, to an advantage in any sheet steel cabinet made of metal of the same thickness where proper openings are provided.

Price includes spring wire clamp with each bushing.

			26	ei Deai	•					
	For Closing Unused Holes for Conduit									
	List No.	Diameter Opening	To Slip Conduit Sise	Std. Pkg.	Wt. Std. Pkg.	Carton Quantity	List Price per C			
	1901 1902 1 <b>903</b>	⅓ in. 1 ¼ ins.	1/2 in. 1/2 in.	200 200 200	51/2 lbs. 7 lbs. 91/2 lbs.	100 100 100	\$5.94 8.73 11.70			
Steel Seal		1 to ins. are made of 16 gau	I in. ige sheet steel and f		cotter pin.	ogie	11.7.3			

Knife Switches, Fuses and Cut-Outs

## METER PROTECTIVE TRIMS AND ADAPTER END PLATE



#### Meter Protective Trims

Trims listed as top trims are for use at top of "Square D" boxes. Those listed as bottom trims are for use at bottom of boxes. Reversible trims may be used at either top or bottom.

Ordinarily top trims are used at top of boxes with bottom connected meters and bottom trims at bottom of boxes with top connected meters.

List No. 1512 is a bottom trim for use with G. E. Type 1-14 or F. W. Type K-5 meters. These meters are both bottom connected and List No. 1512 trim is so designed that these bottom connected meters may be used at bottom of the box to meet special requirements.

All meter trims are made of sheet steel except List Nos. 1515 and 1516 which are of non-magnetic metal. List Nos. 1515 and 1516 are for use with high capacity direct current meters which are affected by stray magnetic fields.

If trims are required for types of meters not mentioned, quotations will be furnished on request.

All meter protective trims listed are for use with Class A boxes (3 inches deep), and when Adapter End Plate List No. 1814 is used, with Class B boxes (4 inches deep).

List No.	Meter Description	Weight Each	Each
1501	Type O. A. (West.) single phase, 5-10 ampere, 2 and 3 wire, top trim	⅓ lb.	\$0.71
1502	Type C (West.) single phase, 20 ampere, 2 wire, bottom trim.	12 іб.	.71
1503	Type I-14 (G. E.) single phase, 5-25 ampere, 2 and 3 wire, top trim	⅓ lb.	.71
1503	Type K-5 (Ft. W.) single phase, below 50 ampere, 2 and 3 wire, top trim	1/2 lb.	.71
1504	Type I-10 (G. E.) single phase, 5-25 ampere, 2 wire, 5-15 ampere, 2 and 3 wire, top trim	32 lb.	.71
1505	Type H New Model (Sang.) single phase, 5-15 ampere, top trim, also Duncan model M-2		
	AC, 3 wire 110,660 volt, 5 to 15 amp. top trim	¾ lb.	.71
1506	Type I (G. E.) single phase, 3-25 ampere, 2 and 3 wire, reversible (top or bottom trim)	13% lbs.	1.72
1507	Type K-4 Form S. A. A. (Ft. W.) single phase, 5-25 ampere, 2 wire; 5-15 ampere, 2 and 3		
	_ wire, top_trim	36 lb.	.71
1508	Type 1-9 (Can. G. E.) Induction Meter, 3-25 ampere, 50-75 ampere, 2 and 3 wire, top trim.	⅓ lb.	.71
1510	Type I (G. E.) single phase, 50-75 ampere, 2 and 3 wire, reversible (top or bottom trim).	21/2 lbs.	2.13
1511	Type O. A. (West.) single phase, 5-10 ampere, 15-80 ampere, 2 and 3 wire, top trim	⅓ lb.	.71
1512	Type 1-14 (G. E.) single phase, 5-25 ampere, 2 and 3 wire, bottom trim	214 lbs.	1.75
1512	Type K-5 (Ft. W.) single phase, below 50 ampere, 2 and 3 wire, bottom trim	2 1/4 lbs.	1.75
1513	Type D-3 (G. E.) Polyphase, up to 75 ampere, reversible (top or bottom)	3 1/4 lbs.	2.62
1514	Type K-3 Form S. B. A. (Ft. W.) single phase, 5-50 ampere, bottom trim	.⅓ lb.	2.71
1515	Type C-6 (G. E.) D.C. Watthour, 5-50 ampere, 2 and 3 wire, reversible (top or bottom trim).	1 1/2 lbs.	2.48
151 <b>6</b>	Type C-7 (G. E.) D.C. Watthour, 5-50 ampere, 2 wire, reversible (top or bottom trim)	2 lbs.	3.38



## Adapter End Plate

Walsha

Ties Deles

## STEEL SERVICE SWITCHES AND DISTRIBUTING CABINETS

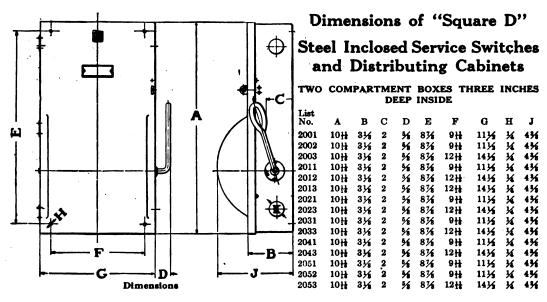
#### FOR 2, 3 AND 4 BRANCH CIRCUITS

#### Double Compartment Boxes

	-Switch (	Compartment- 30 Ampere	No.			Branch Circuit Co	mnartment		List
List	Mai	n Switch	Branch	No.		2 Pole Branch	Cutouts		Price
No.	Volts	Type Fuse	Circuit	Cutouts	Volts	Style	Type Fuse	Wt.	Each
2001	125	Ed. Plug	2	1	125	Double Branch	Ed. Plug	10 lbs.	\$8.78
2002	125	Ed. Plug	3	3	125	Single Branch	Ed. Plug	111/4 lbs.	10.28
2003	125	Ed. Plug	4	2	125	Double Branch	Ed. Plug	1216 lbs.	11.63
2011	250	Cartridge	2	1	250	Double Branch	Cartridge	1114 lbs.	12.45
2012	250	Cartridge	3	3	250	Single Branch	Cartridge	12¾ lbs.	15.15
2013	250	Cartridge	4	2	250	Double Branch	Cartridge	14 🚧 lbs.	16.58
2021	250	Cartridge	2	1	125	3-2 Double Branch	Ed. Plug	10¼ lbs.	10.95
2023	250	Cartridge	4	2	125	3-2 Double Branch	Ed. Plug	13 lbs.	13.80
2031	250	Cartridge	2	1	250	3-2 Double Branch	Cartridge	13¾ lbs.	13.80
2033	250	Cartridge	· 4	2	250	3-2 Double Branch	Cartridge	15⅓ lbs.	16.58
2041	125	Ed. Plug	2	1	125	3-2 Double Branch	- Ed. Plug	10 lbs.	10.28
2043	125	Ed. Plug	4	2	125	3-2 Double Branch	Ed. Plug	13 lbs.	13.13
2051	250	Cartridge	2	1	125	Double Branch	Ed. Plug	10⅓ lbs.	10.28
2052	250	Cartridge	3	3	125	Single Branch	Ed. Plug	11¾ lbs.	11.63
2053	250	Cartridge	4	2	125	Double Branch	Ed. Plug	13 lbs.	13.13

List Nos. 2001 to 2053 inclusive, "Square D" Steel Enclosed Service Switches and Distributing Cabinets are Class A Boxes (3 inches deep), and use Class A End Plates.

Prices do not include fuses, end plates or meter trims. Ground wire lug for grounding switch box furnished as part of regular equipment without charge.



#### SWITCHES 4 INCHES DEEP INSIDE

List No.	A	В	С	D	Е	F	G	н	1	ĸ	List No.	A	В	С	D	E	F	G	н	J	K
5252 5253 5261 5262 5341 5342 5343 5352	14 % 19 % 19 % 16 % 16 % 21 % 16 %	4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1	3 1 2 1/8 2 1/8	13%	173% 15 15 193%	81/2	10 & 10 & 10 & 10 & 10 & 10 & 10 & 10 &	******	5 1 1 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	111111111111111111111111111111111111111	5353 5361 5362 5441 5442 5452 5461 5462	21 1/8 19 1/4 19 1/4 19 1/4 19 1/4 19 1/8	4 1/4 4 1/4 4 1/4 4 1/4 4 1/4	322222222222222222222222222222222222222	13/8/13/8/13/8/13/8/13/8/13/8/13/8/13/8	19 1/2 17 3/6 17 3/6 17 3/6 17 3/6 17 3/6 17 3/6 17 3/6	10 1/8 13 13 13 13 13 13 18	1218 15 15 15 15 15 2018 2018	*******	7777777777777	1 H 1 H 1 H 1 H 1 H 1 H 1 H 1 H 1 H 1 H

#### SWITCHES 3 INCHES DEEP INSIDE

#### SWITCHES 5 INCHES DEEP INSIDE

List No.	A	В	С	D	E	F	G	н	J	List No.	A	В	c	D	E	F	G	н	J	K
5211B 5211E 5251X 5311B 5311E 5351X 5411E 5451X	10 H 10 H 10 H 10 H 10 H 10 H 10 W	333333333333333333333333333333333333333	2 2 2 2 2 2 2 1 2 2 2 2 2 2 2 2 2 2 2 2	8088888888888	87/8 87/8 87/8 91/3 91/3 91/3 88/7 88/7 88/7 88/7 88/7 88/7 88/7 88	33377878	53/8 53/8 53/8 71/8 71/8 71/8 115/8 115/8	* THE STATES OF	4 3/8 4 3/8 4 3/8 4 1/8 4 1/8 4 1/8 4 3/8 4 3/8	5254 5263 5264 5344 5354 5363 5364 5453 5453	25 1/4 25 1/4 31 25 1/4 25 1/4 25 1/4 25 1/4 25 1/4	51/8 51/8 51/8	234 123333	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	23 1/3 23 1/4 29 1/4 23 1/4 23 1/4 29 1/4 23 1/4 29 1/4 29 1/4	914 914 1114 15 15 15 2014 15 15	11 th 13 th 17 th	****	8818881 18881	

No. 7251

Plunger Type

## "SOUARE D" IRONCLAD FUSED SWITCHES



No. 7253 Side Lever Type



No. 7351 Plunger Type

## Standard Type

The desirability and necessity of practical accident prevention in the electrical field is now recognized li industries. To prevent accidents has been proven good business policy.

by all industries. To prevent accidents has been proven good business policy.
"Square D" Ironclad Fused Switches are designed to eliminate accidents to employees, and to protect the equipment with which these devices are used.

The switches may be sealed shut to protect them against tampering or the possible use of fuses of too

large capacity.
"Square D" Ironclad Fused Switches are non-hazardous. All live parts are enclosed in a cast-iron box and the mechanism is operated from outside the box by a handle.

The switch mechanism is of the quick make and quick break type. When closed, a gasket in the lid makes the box fire and fume-proof—installations may be made where exposed to water, steam, fumes or

dust, without injury to the vital parts of the switch.

To replace fuses the cover is opened and the entire mechanism to which the fuses are attached swings out and away from the live parts. The fuse connections are absolutely dead and accidental contact with live parts when replacing fuses is impossible.

"Square D" Ironclad Fused Switches have proved in actual service to be positive insurance against

accidents—they have enabled manufacturers to maintain production schedules by insuring minimum loss from costly shut-downs through injury to employees or machines—they have reduced the cost of fuse replacements, standardized equipment, and because of their rugged construction will outlast the machines

to which they are attached.
"Square D" Ironclad Fused Switches may be locked "off" with a padlock, making operation impossible until the lock has been removed. This feature is of the greatest importance from a safety standpoint. It prevents turning on the current when repairs are being made, either to the electrical connections or to a machine driven by the motor that the switch controls.

#### Indoor Type 250 VOLTS For N. E. C. S. Fuses

Lis <b>t</b> No.	Amperes	Туре	Weight Not Boxed	List Price Each
7251	Double pole, 30	Plunger	12 lbs.	\$13.13
7252	Double pole, 60	Plunger	25 lbs.	30.23
7253	Double pole, 100	Side lever	57 lbs.	65.85
7254	Double pole, 200	Side lever	71 lbs.	91.93
7255	Double pole, 400	Side lever	133 lbs.	167.00
7351	Triple pole, 30	Plunger	23 lbs.	26.35
7352	Triple pole, 60	Plunger	41 lbs.	43.28
7353	Triple pole, 100	Side lever	90 lbs.	97.00
7354	Triple pole, 200	Side lever	100 lbs.	125.33
7355	Triple pole, 400	Side lever	155 lbs.	209.00
7451	Four pole, 30	Plunger	24 lbs.	26.35
7454	Four pole, 200	Side lever	116 lbs.	167.00
	17.1.1 11 1 1 1			01

Price for solid brass padlock, brass chain, two keys, locking device and attaching to switch, \$1 per switch, net additional.

The above switches will be drilled for conduit or equipped with porcelain bushings without additional charge, but if drilling specifications do not accompany order, switches will be furnished without being drilled.

Fuses are not included in the above prices.

Approved by the Underwriters' Laboratories after examination and test under the provisions of the National Electrical Code. Digitized by

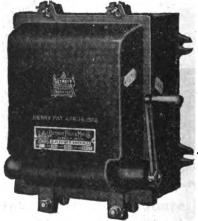
## "SQUARE D" IRON CLAD FUSED SWITCHES



No. 8251. Plunger Type



No. 8252. Plunger Type



No. 8253

25 lbs.

116 lbs.

**\$**225.57

## "Severe Service" Type

#### WEATHERPROOF TYPE

"Square D" severe service switches are designed for outdoor use or wherever they are directly exposed to water, steam, fumes, or the roughest kind of handling.

This type embodies the features of the "Square D" plunger type switch mechanism, being instantly controlled from the outside of a cast iron box. Rubber gaskets give a waterproof design, and phosphor bronze rods, rivets and wing nuts prevent rusting. All parts are substantially made, and there is nothing whatever in this switch to get out of order.

#### 250 VOLTS For N. E. C. S. Fuses

**DOUBLE POLE** 

#### List Weight List Price No. Amperes Not Boxed Туре Each 30 8251 Plunger 13 lbs. \$16.95 Plunger Side Lever 8252 60 26 lbs. 30.00 8253 100 57 lbs. 34.80 8254 200 Side Lever 71 lbs. 46.95 8255 400 Side Lever 133 lbs. 69.45 TRIPLE POLE 8351 \$75.27 Plunger 24 lbs. $100.\overline{27}$ 60 Plunger Side Lever 8352 42 lbs. 8353 100 90 lbs. 109.00 8354 200 Side Lever 100 lbs. 142.13 8355 400 Side Lever 155 lbs. 183.97 FOUR POLE

We can furnish the above switches with padlock and locking device so they may be locked in the "off" position if desired. Price for solid brass padlock, brass chain, two keys, locking device and attaching to switch, \$1 per switch net, additional.

Plunger

Side Lever

The above switches will be drilled for conduit or equipped with porcelain bushings without additional charge, but if drilling specifications do not accompany order, switches will be furnished without being drilled.

Fuses are not included in the above prices.

30

200

Approved by the Underwriters' Laboratories after examination and test under the provisions of the National Electrical Code. Digitized by GOOGLE

8451

8454

## "SQUARE D" IRONCLAD FUSED SWITCHES







Cover Open

No. 7351 B Cover Closed No. 7351 B

Double Pole "Severe Service" Junction Box Type

"Square D" Severe Service Junction Box Type provides for the branching out of circuits in all directions. The porcelain base holding the terminals is mounted on a sub-base allowing the main lines to pass through the box under the porcelain base. List No.

Amperes
Volts
Volts
Volt Not Boxed
List Price Each
225 16 lbs.
\$22.58

Service Box Type

Triple Pole, Solid Neutral, 0-60 Amperes, 250 Volts

Volts

250

250

28 lbs. List No. 7351B 7352B List Price Each \$22.50 37.65







No. 7251 L No. 7252 L

## "Square D" Ironclad Fused Switches

3 HEAT INDICATING SWITCH
This switch was designed for a concern making laundry machines to be used on electrically heated ironing machines of

Price does not include Pilot Lamp.

"Square D" Ironclad Indicating Switch—Double Pole

This type of 30 ampere, 250 volt two pole switch is designed to provide visual proof whether or not the circuit that the switch controls is complete.

List No.

Amperes
Volts
Wt. Not Boxed
List Price Each
7251 L
30
250
16 lbs.
\$22.50

Prices do not include Pilot Lamp.

Prices do not include Pilot Lamp.

We can furnish the above switches with padlock and locking device so they may be locked in the "off" position if desired. Price for solid brass padlock, brass chain, two keys, locking device and attaching to switch \$1 per switch net, additional.

The above switches will be drilled for conduit or equipped with porcelain bushings without additional charge, but if drilling specifications do not accompany order, switches will be furnished without being drilled.

Fuses are not included in the above prices.

Approved by the Underwriters' Laboratories after examination and test under the provisions of the National Electrical Code.

70 Knife Switches, Fuses and Cut-Outs

## "SQUARE D" INDUCTION MOTOR STARTERS



Side Lever Type Nos. 6251, 6361



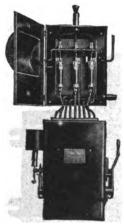
Front Lever Type Nos. 6351, 6451

#### Front and Side Lever Types

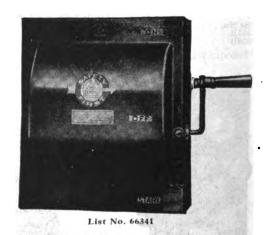
Ironclad-Indestructible-Non-Hazardous

"Square D" induction motor starters (formerly "Detroit" induction motor starters) are designed for use with motors up to and including 7½ H.P. or motors which may be started by switching them directly on to full voltage service.

	"Square D" Induction Motor S	tarters			•
List No.		Amperes	Volta	Weight Not Boxed	List Price Each
6251	Single phase	30	250	2014 lbs.	\$41.53
6351	Three phase.	30	250	26 lbs.	33.75
6451	Two phase	30	250	28 lbs.	41.53
6361	Three phase	30	600	76 lbs.	75.15
	Three phase no-voltage release	<b>3</b> 0	600	82 lbs.	116.56
N	OTE: List No. 6361N is the same as List No. 6361, but is equipped with	no-voltage	release.		



List No. 58342



"Square D" Steel Enclosed Compensator Switch 250 Volts. Triple Pole

		· · · · · · · · · · · · · · · · · ·	· _	
List No.	Amperes	Depth of Box	Weight	List Each
58351	30	4 ins.	20 lbs.	\$22.50
58352	60	4 ins.	21 lbs.	23.32
58353	100	4 ins.	32 lbs.	36.70
58354	200	5 ins.	61 lbs,	31.88
		500 Volts, Triple Pole		
58341	30	4 ins.	23 lbs.	\$23.56
58342	60	4 ins.	24 lbs.	27.44
58343	100	4 ins.	34 lbs.	40.80
		600 Volts, Triple Pole		
58364	200	5 ins.	100 lbs.	\$88.50
Prices do ne	ot include fuses or end plates	3.		

## "Square D" Steel Enclosed Double Throw Motor Starting Switch STRAIGHT INDUCTION TYPE—3 PHASE

List No. 66351 66341 66342	Amperes 30 30 60	Volts 250 500 500	Depth of Box 3 ins. 4 ins. 4 ins.	Conduit 18313 18413 18414	d Plates——— Open Wiring 19332 19432 19433	Weight 14 ½ lbs. 27 lbs. 27 ½ lbs.	List Each \$22,50 37,50 42,76
			STAR-DEL	TA TYPE-3 P	HASE		
65351 65341 65342	30 30 60	250 500 500	3 ins. 4 ins. 4 ins.	18313 18414 18415	19332 19434 19434 Digitized by	1414 lbs. 27 lbs. 2714 lbs.	\$22.50 37.50 42.76
Talla Que	leches Press s	-4 Cut-Oute		73	Digitized by	000/10	

Sherardized





Capping



No. 333-Base and Cap

#### "National" Metal Molding

"National" metal molding consists of two pieces, base and capping, so formed as to "snap" together the capping "snapping" over the base.

It is finished under the non-corrosive Sherardizing process in which finely divided zinc is driven into the pores of the base metal, effecting an alloy which is not only rust proof but which cannot be scraped off.

It is particularly adapted for steel ceiling, show window, show case, theater or similar construction where appearance, as well as electrical and mechanical safety, is essential.

#### Bending

The molding lends itself readily to bending and, with reasonable care, may be worked on any radius down to four and one-half inches.

Bends must be made in all cases with base and capping snapped together.

#### The Screw-and-Slot Principle

The base of "National" metal molding is furnished with a "Keyhole Slot" at each end as shown in illustration.

This "Keyhole Slot" is used in connection with the special Bond Screws furnished in all "National" metal molding fittings.

#### Punching

The new style "National" hand punch, as shown on another page, is used for punching the "Keyhole Slot" where lengths are cut.

#### Cutting

Because of the light stock, hacksaw blades having fine teeth and commonly known as "tube saws" should be used for cutting. Some construction men also recommend marking deeply with a file and breaking.

Single braid wire has been approved for use with "National" metal molding, but it must be laid in and not "fished."

List No.	*	Unit Pkg.	Std. Pkg.		Unit Pkg.	Std. Pkg. of 1000 Ft.
	Metal molding and capping.	0		\$8.00		\$115.20





-Fitting Coupling

#### BASE COUPLING

The "National" base coupling is designed to do the same work for "National" metal molding as does a coupling for rigid conduit, and its use is necessary to obtain the perfect bond between lengths required by the code. The outlines shown in cut illustrate the slotted ends of the molding base which are placed in position over the holes provided at the ends of the coupling and the whole fastened securely to the wall by wood screws passing through both molding and base.

	This device prevents loose joints.				Sched	lule "R"
List No.		Unit Pkg.	Std. Pkg.	Pkg. Wt.	Mfrs. List per 100	W. E. List per 100
344	Base coupling	50	500	15 lbs.	<b>\$2.50</b>	<b>\$5</b> .00

#### FITTING COUPLING

250 8 lbs. Fitting Coupling..... \$3.00 436

#### Sherardized



No. 334-Cross



No. 335-Tee

## Molding Cross and Tee

Schedule "R"

No. 334 Molding Cross fitting performs the same function as an "X" condulet. The expanded or raised center of the capping affords additional space which permits splicing of wires for junction leads. Although the size has been reduced, more room for the laying in of joints has been provided than in the old style through a deep recessing of the covers.

No. 335 Molding Tee is used in the same manner as a molding taplet or "T" condulct. The capping is expanded or raised, permitting ready splicing of junction leads in the additional space thus afforded. The new "National" screw-and-slot system of coupling, now used in all fittings, makes the use of four and three screws or bolts for installing these fittings unnecessary.

C-		lule	•••	,,,,
30	1100	une		•

List No.		Unit Pkg.	Std. Pkg.	Std. Pkg. Wt.	Mfrs. List per 100	W. E. List Each
334	Molding cross	30	120	25 lbs.	\$17.00	\$0.34
335	Molding tee	30	120	23 lbs.	14.00	. 28



No. 336 90° Flat Elbow



No. 437 45° Flat Elbow



No. 337 External Elbow



No. 338 Internal Elboy

#### Flat External and Internal Elbows

The size of these elbows has been reduced. This reduction simplifies the work of breaking around large obstructions. Where it is necessary to break around "I" beams, for example, four of these elbows may now be assembled with short lengths of molding to form a U-shaped unit, which may then be installed as one piece. The new screw-and-slot system of coupling has greatly simplified the installation of the flat-elbow by making the use of two screws or bolts unnecessary. Base and capping of the molding are cut the same length where these fittings are used.

#### Schedule "R"

List No.		Unit Pkg.	Std. Pkg.	Std. Pkg. Wt.	Mfrs. List per 100	W. E. List Each
336	Flat elbow	30	240	30 lbs.	\$11.00	\$0.22
437	45° Flat Elbow	20	100	10 lbs.	11.00	. 22
337	External elbow	30	60	8 lbs.	11.00	. 22
<b>33</b> 8	Internal elbow	30	<b>120</b>	tized by	00000	.22

#### Sherardized



No. 360 Attachment Plug



No. 390 Attachment Plug

## Attachment Plugs

Fittings 360 and 360A are designed to mount upon the molding and are shipped in "dead end" form but can easily be converted into "continuous type" by twisting off the upturned ear, on the base plate, which blanks the molding opening.

Fittings 390 and 390A are designed for use with the No. 342R Outlet Box and Nos. 423 and 424 Subbases only, and cannot be mounted upon the molding.

						Sciled	uie A
List			Unit	Std.	Std. Pkg.	Mfrs. List	W. E. List
No.		Туре	Pkg.	Pkg.	Wt.	per 100	Each
360	Porcelain, attachment plug	Molding	10	100	45 lbs.	<b>\$</b> 38.00	<b>\$</b> 0.76
360A	Composition, attachment plug	Molding ,	10	100	45 lbs.	38.00	.76
390	Porcelain, attachment plug	Outlet box	10	100	45 lbs.	35.00	. 70
390A	Composition, attachment plug	Outlet box	10	100	45 lbs.	39.00	.78



No. 430 Combination Fitting



No. 391 Non-Indicating Switch



Schodule "Y"

No. 392 Indicating Switch

## Combination Fixture and Drop Cord Fitting

Fitting No. 430 is designed to mount upon the molding and is shipped "dead end" style but can easily be converted into continuous by twisting off the upturned ear, on the base plate, which blanks the molding opening at one end. It is equipped with a special patented fiber bushing which is approved as an insulating joint and can be furnished with bushings tapped for 1/2 inch, 1/4 inch or 3/4 inch fixture stems.

						Sched	lule "X"
List	·		Unit	Std.	Std. Pkg.	Mfrs. List	W. E. List
No.		Туре	Pkg.	Pkg.	Wt.	per 100	Each
430	Combination fixture and drop cord.	Molding	10	80	30 lbs.	<b>\$40.00</b>	<b>\$0</b> .80

## 5 Ampere Snap Switches

Fittings Nos. 391 and 392 are designed to mount upon the molding and are shipped "dead end" style, but can easily be converted into continuous by twisting off the upturned ear, on the base plate, which blanks the molding opening at one end.

						Schedu	ile "X"
List			Unit	Std.	Std. Pkg.	Mfrs. List \	W. E. List
No.		Amperes	· Pkg.	Pkg.	Wt.	per 100	Each
391	Snap Switch Non-Indicating	5	10	100	35 lbs.	\$41.00	\$0.82
392	Snap Switch Indicating	5	10	100	35 lbs.	45.00	.90
		4		Digitize	ed by <b>U</b> O	Wielna Ac	cessories









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## Keyless Receptacles and Rosettes

•	Metal Cap-Box Cover Type						Schedule "X"	
List No.		For Use On	Unit Pkg.	Std. Pkg.	Wgt. Lbs.	Mfrs. List per 100	W. E. List Each	
474	3½ in. Keyless Receptacle	Straight molding jobs	1	100	45	\$60.00	\$1.20	
475	3½ in. Keyless Receptacle	3 in. conduit box outlet	-1	100	45	62.00	1.24	
*476	3½ in. Keyless Receptacle	Straight molding jobs	1	100	45	52.00	1.04	
*477	3½ in. Keyless Receptacle	3 in. conduit box outlets	1	100	45	55.00	1.10	
480	3½ in. Two-piece Rosette	Straight molding jobs	1	100	45	62.00	1.24	
481	3½ in. Two-piece Rosette	3 in. conduit box outlets	1	100	45	64.00	1.28	
†481	3½ in. Fixture Rosette	Straight molding jobs	1	100	45	64.00	1.28	
†485	3½ in. Fixture Rosette	3 in. conduit box outlets	1	100	45	66.00	1.32	









Schedule "X"

Keyless Receptacles and Rosettes

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	3.4	I-4-1 C-	- P 4	~	т		
	IV	letai Ca	p—Box (	Cover	ı ype		

List			Unit	Std.	Wgt.	Mfrs. List	W. E. List
No.		For Use On	Pkg.	Pkg.	Lbs.	per 100	Each
470	4½ in. Keyless Receptacle	Straight molding jobs	1	100	60	<b>\$7</b> 8. <b>00</b>	<b>\$1.56</b>
471	4½ in. Keyless Receptacles	4 in. conduit box outlets	1	100	60	80.00	1.60
*472	4½ in. Keyless Receptacle	Straight molding jobs	1	100	60	<b>58.00</b>	1.16
<b>*</b> 473	4½ in. Keyless Receptacle	4 in. conduit box outlets	1	100	60	60.00	1.20
478	4½ in. Two-piece Rosette	Straight molding jobs	1	100	60	73.00	1.46
479	4½ in. Two-piece Rosette	4 in. conduit box outlets	1	100	60	75.00	1.50
†482	4½ in. Fixture Rosette	Straight molding jobs	1	100	60	78.00	1.56
†483	4½ in. Fixture Rosette	4 in. conduit box outlets	1	100	60	80.00	1.60









Box Cover Receptacles and Rosettes

	Metal Cap					Schedule "X"		
List No.		Unit Pkg.	Std. Pkg.	Wgt. Lbs.	Mfrs. List per 100	W. E. List Each		
571	Box Cover Receptacle, for 4 in. conduit boxes	1	100	55	<b>\$52.00</b>	\$1.04		
<b>*</b> 573	Box Cover Receptacle, for 4 in. conduit boxes	1	100	55	45.00	.90		
575	Box Cover Receptacle, for 3 in. conduit boxes	1	100	. 40	39.00	.78		
<b>*</b> 577	Box Cover Receptacle, for 3 in. conduit boxes	1	100	40	34.00	. <b>68</b>		
579	Box Cover Cord Rosette, for 4 in. conduit boxes	1	100	55	56.00	1.12		
581	Box Cover Cord Rosette, for 3 in, conduit boxes	1	100	40	45.00	.90		
†583	Box Cover Fixture Rosette, for 4 in. conduit boxes	1	100	55	60.00	1.20		
†58 <b>5</b>	Box Cover Fixture Rosette, for 3 in. conduit boxes	1	100	40	48.00	.96		

\*All porcelain type.
†Furnished tapped for ¾ inch gas pipe only.

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Sherardized



No. 348 One Piece Rosette



No. 423 Standard Sub-base



No. 424 Angle Sub-base

### Porcelain Rosettes

Schedule "X"

This rosette is arranged to be applied directly over the molding, it being unnecessary to cut the base of the molding to install it, the capping only being removed to allow the introduction of wires into the rosette. It is equipped with metal base plates in dead end form, but is arranged for easy conversion into continuous type by twisting off the ear which blanks the molding opening at one end, and arranged to be supported by the molding.

Installation of this device requires an opening 1% inches long in the capping.

List	One piece	Unit	Std.	Std. Pkg.	Mfrs. List	W. E. List
No.		Pkg.	Pkg.	Wt.	per 100	Each
348		20	120	35 lbs.	\$9.00	\$0.18
	_					

	Sub-bases for	r Fitt	ings	Schedule "X		
423	Standard Sub-base	10	100	35 lbs.	\$20.00	\$0.40
424		10	50	40 lbs.	30.00	.60



No. 377 Single Clamp Bushing



No. 433 **Double Clamp Bushing** 



No. 376 Corner Box

# Clamp Bushings

Schedule "R"

These fittings perform the same function with "National" metal molding as does'a locknut and bushing for conduit, in bushing the molding wherever it joins any fitting of a box type and in locking the molding to any fitting of such type. The clamp consists of two parts, a base and a cap. In installing, the base piece is fastened to the fitting, with the screws provided in all fittings of box type for the purpose. The molding is then fastened to base piece and the cap of the clamp snapped on last over the molding capping with the small up-turned lip inside the box. The double clamp bushing is for connecting two pieces of molding with one opening in outlet box.

The base and capping of the molding are cut the same length when this fitting is installed.

List		Unit	Std.	Pkg.	Mfrs. List	W. E. List
No.		Pkg.	Pkg.	Wt.	per 100	Each
377	Single Clamp Bushing	50	200	8 lbs.	<b>\$3.50</b>	\$0.07
433	Double Clamp Bushing	10	100	10 lbs.	12.00	24

### Corner Box

Schedule "R"

This box is designed for use where the feeder wires are brought through a rigid or flexible conduit into

a point in the corner of the room from whence the metal molding is to be run.

The fitting is provided with four "twistouts" for molding entrance and with one ½ inch conduit knockout in the base.

Bushing 377 or 433 must be used for entering this box with molding, as the "twistouts" are too small for direct entrance.

### Western Electric

### "NATIONAL" METAL MOLDING

#### Sherardized



No. 375-Outlet Box



No. 378-Porcelain Cover



No. 383-Blank Cover

### Outlet Box and Covers

Schedule "R"

No. 375 outlet box may be used either as an outlet surface switch or junction box, adapted for molding to molding runs only. Four "twistouts" are provided for molding entrance, but there is no conduit knock-out in its base, therefore its use is limited to straight molding work. Bushing No. 377 or 433 must be used for entering this box with molding, as the "twistouts" are too small for direct entrance with molding.

No. 378 porcelain covers are furnished in one, two, three and four hole types for use with No. 375 outlet box.

No. 383 blank cover is used where No. 375 box is installed as a junction box.

List No.		Unit Pkg.	Std. Pkg.	Std. Pkg. Wt.	Mfrs. List per 100	W. E. List Each
375	Outlet box	20	120	25 lbs.	<b>\$20</b> .00	\$0.40
378	Porcelain cover, one way	10	40	7 lbs.	10.00	. 20
379	Porcelain cover, two way	10	40	7 lbs.	10.00	. 20
380	Porcelain cover, three way	10	40	7 lbs.	10.00	.20
381	Porcelain cover, four way	10	40	7 lbs.	10.00	. 20
383	Blank cover	20	40	4 lbs.	5.00	. 10



No. 341-Junction Box



No. 410-Fixture Outlet Box



No. 339-Outlet Box

#### Junction and Outlet Boxes

Schedule "R"

No. 341 junction box consists of two parts, base and cap. This box is provided with four molding "twistouts" and one ½-inch knockout in its base for the introduction of rigid or flexible conduit feeder.

No. 339 outlet box differs from the above junction box in no detail save that it is equipped with a 1/2 inch insulating bushing for drop cord work.

Li <b>st</b> No.		Unit Pkg.	Std. Pkg.	Std. Pkg. Wt.	Mfrs. List per 100	W. E. List Each
341	Junction box	20	120	39 lbs.	\$25.00	\$0.50
410	Fixture Outlet box	10	. 00	40 lbs.	35.00	. 70
339	Outlet box	20	D <b>60</b> ize	20 lbs.	25.00	.50
Condu	it and Wiring Accessories 8					





10 Ampere No. 342—Snap Switch Base



No. 365

# Snap Switch Bases

Schedule "R"

No. 342 fitting is designed for mounting snap switches, rosettes and similar devices. It is provided with four molding "twistouts" and one ½ inch conduit knockout in its base.

List		Unit	Std.	Std. Pkg.	Mfrs. List	
No.		Pkg.	Pkg.	₩t.	per 100	Each
342	Snap switch base, 10 amperes	20	120	35 lbs.	\$25.00	<b>\$0.50</b>
342R	Snap switch base, 5 amperes	20	120	35 lbs.	25.00	. 50

Bushing No. 377 or 433 must be used for entering fitting 342 type with molding, as the twistouts are too small for direct entrance.

### Complete Canopy Base

Schedule "R"

These canopy bases are designed to provide a standard form of outlet for installing fixtures on a straight metal molding job. They are made in two sizes,  $4\frac{1}{2}$  inches and 6 inches. The  $4\frac{1}{2}$  inch for use in all average installations and the 6 inch for occasional use with large fixture canopies. Both sizes are drilled and tapped to take any standard fixture stud. One  $\frac{7}{8}$  inch and two  $\frac{9}{8}$  inch knockouts are provided in the base plate of these canopies in addition to the usual four molding "twistouts" in the covers in order that they may be used for picking up a circuit at an existing "concealed knob and tube outlet" if desired.

365	Canopy base and cap, 4½ inches diameter	10	40	30 lbs.	<b>\$</b> 35.00	<b>\$</b> 0.70
366	Canopy base and cap, 6 inches diameter	10	40	53 lbs.	50.00	1.00

Bushing No. 377 or 433 must be used for entering these canopies with molding as the twistouts are too small for direct entrance.



No. 363A



4½ Inch Split Type Cover



No. 363
4½ Inch Split Type Adapter Plate

### 4½ Inch Blank Cover

Schedule "R"

This cover is designed for use with the No. 363 adapter plate or the base of the No. 365 canopy base at any point where a blank form of cover for these plates is desirable, as in cases where a circuit is picked up for extension at an existing "pull box" or "junction box," or where a fixture is relocated and its original outlet used as a junction.

363A 4½ inch blan

4½ inch blank cover.....

20

8 lbs.

**\$**15.00

\$0.30

# Split Type Cover and Adapter Plate Schedule "R"

No. 363B split type cover is designed for use with No. 363 adapter plate; it is made in split form for use in "picking up" a circuit at an existing fixture outlet without removing or disturbing the fixture. The object of its large size is to form a seat for fixture canopies and so avoid the mutilation and labor necessary to fitting canopies down over the molding.

No. 363 split type adapter plate is designed in conjunction with covers No. 363A and 363B, to care for a troublesome detail of construction for which no fitting of any kind has heretofore been available—the picking up and extension of circuits from existing fixture outlets without removing or disturbing the fixture.

It is arranged with slots and holes through which it can be fastened to any three (3) inch or four (4) inch conduit outlet box with the cover screws provided in such boxes. A special yoke or bridge is furnished with each plate through which it can be hung on any "open cover," "extension plate" or "plaster ring."

Note: When ordering covers 363A or 363B bear in mind they are covers only and that a corresponding number of 363 plates must be ordered with them. Bushing No. 377 or 433 must be used for entering No. 363 with molding, as the "twistouts" in the covers are too small for direct entrance.

#### Sherardized



No. 395 Chain Pull Receptacle



No. 396 Chain Pull Receptacle



No. 397

Key Receptacle



No. 398 Key Receptacle

# Chain Pull Receptacles

Schedule "X"

Fitting No. 395 is designed to mount upon the molding and is shipped in "dead end" form but can easily be converted into "continuous type" by twisting off the upturned ear, on the base plate, which blanks the molding opening at one end.

Fitting 396 is designed for use with 342R Outlet Box and Nos. 423 and 424 sub-bases only, and cannot be mounted upon the molding.

List No.		Туре	Unit Pkg.	Std. Pkg.		Mfrs. List per 100	W. E. List Each
395 396	Pull, receptacle			100 100	50 lbs. 50 lbs.	\$64.00 62.00	\$1.28 1.24

# Key Receptacles

Schedule "X"

Fitting No. 397 is designed to mount upon the molding and is shipped in "dead end" form but can easily be converted into "continuous type" by twisting off the upturned ear, on the base plate, which blanks the molding opening at one end.

Fitting No. 398 is designed for use with the No. 342R Outlet Box and Nos. 423 and 424 sub-bases only, and cannot be mounted upon the molding.

397	Key, receptacle	Molding	10	100	45 lbs.	\$41.00	\$0.82
398	Key, receptacle	Outlet box	10	100	45 lbs.	<b>39.00</b>	. 78



No. 356 Keyless Receptacle



No. 399 Keyless Receptacle



No. 431 Two-piece Rosette



No. 432 Two-piece Rosette



No. 429 Fixture Rosette

# Keyless Receptacles

Schedule "X"

Fitting No. 356 is designed to mount upon the molding and is shipped in "dead end" form but can be easily converted into "continuous type" by twisting off the upturned ear, on the base plate, which blanks the molding opening at one end.

Fitting No. 399 is designed for use with the No. 342R Outlet Box and Nos. 423 and 424 sub-bases only and cannot be mounted upon the molding.

<b>35</b> 6	Keyless Receptacle	Molding	10	100	37 lbs.	<b>\$</b> 38.00	\$0.76
<b>3</b> 99	Keyless Receptacle	Outlet box	10	100	40 lbs.	27.00	.54

# Two-piece Rosettes

Schedule "X"

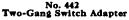
Fitting No. 431 is designed to mount upon the molding and is shipped in "dead end" style but can easily be converted into continuous by twisting off the upturned ear, on the base plate, which blanks the molding opening at one end.

Fitting No. 432 is designed for use with the No. 342R Outlet Box and Nos. 423 or 424 sub bases only and cannot be mounted upon the molding.

431	Two-piece Rosette	Molding	10	120	67 lbs.	\$28.00	\$0.56
432	Two-piece Rosette	Outlet box	10	120	67 lbs.	25.00	.50
429	Fixture Rosette			100	35 lbs.	35.00	. 70
430	Fixture Rosette	Molding			30-lbs.	<b>40.00</b>	. 80

Sherardized









No. 443 Spacers



No. 441



Flush Box and Adapter

# Switch Box Fittings

No. 442 is a two-gang flush switch adapter. Made in split form to permit building up into large gangs. No. 441 adapter is designed to mount on any of the standard makes of wall cases, the switches or receptacles being removed and remounted upon the cover of the adapter.

No. 438 flush switch box and adapter plate is designed for the installation of flush switches or recep-

tacles on new metal molding jobs. It is especially designed for shallow partitions and brick work.

Bushing No. 377 or 433 must be used for entering these canopies with molding, as the "twist-outs" are too small for direct entrance.

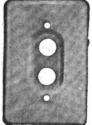
		I WU-GANG FLUSH SWITCH ADAPTER						
List			Unit	Std.	Std. Pkg.	Mfrs. List	W. E. List	
No.			Pkg.	Pkg.	Wt.	per 100	Each	
442	Two-gang flush	switch adapter	10	10Ŏ	80 lbs.	<b>\$55</b> .00	\$1.10	
		SPACERS FOR USE	WITH	NO. 442	ADAPTER	Sche	dule "R"	
List		Builds No. 442	Unit	Std.	Std Pkg.	Mfrs. List	W. E. List	
No.	Туре	Into	Pkg.	Pkg.	₩t. ¯	per 100	per Pair	
443	Single	3 Gang	1Ŏ	100	13 lbs.	\$20.00	\$0.40	
444	Double	4 Gang	10	100	25 lbs.	40.00	.80	
445	Triple	5 Gang	10	100	38 lbs.	60.00	1.20	
446	Quadruple	6 Gang	10	100	50 lbs.	80.00	1.60	
	NOTE: Two No. 44	3 Spacers may be used in pla	ce of No	. 444 to bu	ild No. 442 into	4 gang, three	in place of	

No. 445 or four in place of No. 446, although the use of 444, 445 or 446 makes a better looking and simpler job.

TYPES No. 441 AND 438 ADAPTERS

Schedule "R"

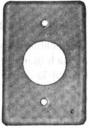
	1 1 1 LD 110. TTL 1	711D 730	ADAI I		Scile	anie v
List		Unit	Std.	Std. Pkg.	Mfrs. List	W. E. List
No.		Pkg.	Pkg.	Wt.	per 100	Each
441	Flush switch adapter, solid type	10	10Ŏ	40 lbs.	<b>\$</b> 27.00	\$0.54
<b>43</b> 8	Combination flush box and adapter	10	20	20 lbs.	40.00	. 80



No. 451-Push Type



No. 461-Rotary Type



No. 447-Plug Type



No. 448-Blank Type

### Flush Switch Plates

Schedule "R"

These plates are designed for use with "National" flush switch adapter No. 441 and 438. The openings in Nos. 451 and 448 are standardized for use with standard makes of push and rotary flush switches. No. 447 is designed for use with Hubbell flush plug receptacle No. 5547 and similar devices.

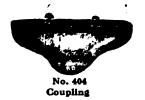
No	o. 448 is des	signed for us	se in case a switch or	receptacle	is remove	d for relocating	g and its orig	rinal outlet
used fo	r a junction	only.	,	Ŭnit	Std.	Pkg.	Mfrs. List	W. E. List
List No.	Type	Style .	Finish	Pkg.	Pkg.	Wť.	per 100	Each
451	Push	Single	Sherardized	10	100	20 lbs.	<b>\$</b> 12.00	\$0.24
452	Push	2 Gang	Sherardized	10	100	20 lbs.	<b>24</b> .00	.48
453	Push	3 Gang	Sherardized	10	100	20 lbs.	<b>36</b> .00	.72
461	Rotary	Single	Sherardized	10	100	20 lbs.	12.00	124
462	Rotary	2 Gang	Sherardized	10	100	20 lbs.	24.00	.48
463	Rotary	3 Gang	Sherardized	10	100	20 lbs.	36.00	.72
447	Plug	Single	Sherardized	10	100	20 lbs.	12.00	.24
448	Blank	Single	Sherardized	10	100	20 lbs.	12.00	. 24

Note: "National" Flush Switch Adapters No. 441, 438 and 442 are now made in size to fit all standard flush plates, hence No. 451, 461, 447 and 448 plates are now furnished in sherardized finish only.

#### Sherardized



No. 367 Porcelain Cover



# Metal Molding Fittings

Schedule "R"

Nos. 367 and 368 porcelain covers are used in connection with No. 404 coupling through which the wires are brought. The covers are fastened by means of screws in the face of the coupling.

No. 404 fitting is designed for use as a junction between "National" metal molding and "open work," and should be used in all cases where necessary to pass from molding to this class of construction or to the terminal lugs of meters, knife switches, etc. The coupling is attached to the molding base by means of the screw in the coupling and after the wires have been laid in the capping is brought up flush with the fitting and snapped on over the molding base.

List		Unit	Std.	Std. Pkg.	Mfrs. List	W. E. List
No.		Pkg.	Pkg.	Wt.	per 100	Each
<b>3</b> 67	2 hole porcelain cover	10	20	6 lbs.	\$10.00	\$0.20
<b>3</b> 68	3 hole porcelain cover	10	20	6 lbs.	10.00	. 20
404	Molding to open work coupling	10	20	7 lbs.	18.00	. 36





# Tee Fittings

Schedule "R"

Nos. 405 and 405A conduit to molding tee is designed for use where a tap from runs of ½ inch or ¾ inch conduit to "National" metal molding is desirable, as in cases where a series of side wall outlets are fed from a line of rigid conduit installed close up in the corner on the floor and risers to the outlets run in "National" metal molding.

Nos. 411 and 411A molding to conduit tee is designed for use where a tap from runs of "National" metal molding to ½ inch or ¾ inch conduit is desirable, as in cases where it is necessary to pass from some point in a line of molding on the ceiling to the floor above in conduit.

The new "National" screw-and-slot system of coupling has not only permitted a reduction in the size of these fittings and a marked improvement in their appearance, but has eliminated the use of covers and small screws.

The molding base and capping is cut the same length when fittings Nos. 404, 405 and 405A are installed, but the base only is cut in installing Nos. 411 and 411A, the capping continuing over and forming a cover for these fittings.

List		Unit	Std.	Std. Pkg.	Mfrs. List	W. E. List
No.		Pkg.	Pkg.	Wt.	per 100	Each
405	½ inch, conduit to molding tee	10	20	15 lbs.	\$35.00	\$0.70
405A	34 inch, conduit to molding tee	5	10	10 lbs.	40.00	. <b>80</b>
411	½ inch, molding to conduit tee	10	20	10 ļbs.	25 <sub>1</sub> .00	. 50
411A	34 inch, molding to conduit tee	10	10 Digit	ized b <b>6 lbs.</b> O	30.00	.60
Condu	t and Wiring Accessories	12			O	

Sherardized















No. 414

No. 416

# Molding Couplings and Elbows

Schedule "R"

Nos. 401 and 401A fittings are designed for use in effecting a junction between "National" metal molding and any fitting having ½ inch or ¾ inch conduit knockouts, such as a surface type panel box or any fitting having a ½ inch or ¾ inch tapped and threaded boss, such as condulet.

Nos. 402 and 402A fittings are designed for use as couplings between "National" metal molding and ½ inch or ¾ inch conduit. The ½ inch size in particular should be included in all stock orders since its use is necessary, in most instances, in connection with the short lengths of conduit required for passing through floors in metal molding inde through floors in metal molding jobs.

Nos. 403 and 403A fittings are designed for use as elbow couplings between the "National" metal molding and ½ inch or ¾ inch conduit.

Nos. 417 and 417A fittings are designed for use in effecting an elbow junction between "National"

which an elbow exit is necessary, as in the case of coming out of a panel box mounted on the surface of a pillar and running back to and rising upon the pillar.

The new "National" screw-and-slot system has not only permitted a reduction in the size of these

fittings and a marked improvement in their appearance, but has eliminated the use of covers and small

screws.

The base and capping of the molding is cut the same length where fittings No. 401, 401A and 402 and 402A are installed, but the base must be cut ¾ inch shorter when installing Nos. 403, 403A, 417 and 417A to permit the capping to lap over and form a cap for these fittings.

List No.	·	Unit Pkg.	Std. Pkg:	Std. Pkg. Wt.	Mfrs. List per 100	W. E. List Each	W. E. List per 100
401	Male coupling, 1/2-inch	30	60	8 lbs.	\$15.00	\$0.30	\$25.20
401A	Male coupling, 3/4-inch	10	20	3 lbs.	20.00	.40	33.60
402	Female coupling, ½-inch	30	60	10 lbs.	15.00	. 30	25.20
402A	Female coupling, 3/4-inch	10	20	3 lbs.	20.00	.40	33.60
403	Male elbow, ½-inch	20	40	8 lbs.	18.00	36	30.24
403A	Male elbow, ¾-inch	10	20	4 lbs.	22.00	. 44	36.96
417	Female elbow, 1/2-inch	20	40	8 lbs.	18.00	.36	30.24
417A	Female elbow, %-inch	10	10	4 lbs.	22.00	. 44	36.96
414	Armored cable coupling	10	20	3 lbs.	20.00	.40	33.60
415	90° elbow coupling, right hand	10	50	15 lbs.	18.00	.36	30.24
416	90° elbow coupling, left hand	10	50	15 lbs.	18.00	.30	30.24











Single Clamp

Double Clamp

Ground Clamp

Single Clamp Double Clamp

# Metal Molding Clamps

Schedule	"R"

List		Unit	Std.	Std. Pkg.	Mfrs. List	W. E. List
No.		Pkg.	Pkg.	Wt. per 100	per 100	Each
345	Single clamp plain	100	1000	13 lbs.	<b>\$</b> 0.75	\$1.50
<b>354</b>	Double clamp plain	50	100	3 lbs.	1.50	3.00
434	Single clamp with base plate	100	1000	30 lbs.	3.60	<b>7</b> . <b>20</b>
435	Double clamp with base plate	50	200	8 lbs.	4.50	9.00

Ground Clamp

Schedule "R"

Ground clamp..... 355

20

40itized b2 1bs. 00 26.00

\$12.00

Sherardized



Metal to Wood Molding Coupling



Method of Applying No. 425



No. 425 Strap Clamp



# Metal to Wood Molding Coupling

Schedule "R"

This fitting is designed for use as a coupling in effecting a junction between an existing run of wood molding and "National" metal molding.

It is arranged for use with Jordan Taplets, or similar types of approved wood molding fittings, and such a fitting must be used in connection with No. 369 where a right angle tap is made from wood molding. In cases where the circuit is picked up at the end of a run of wood molding for extension in metal molding, a wood molding fitting may be dispensed with and No. 369 butted against the backing of the wood molding, from which 34 inch must be cut to allow the wood molding capping to extend over and form a cover for No. 369.

List		Unit	Std.	Std. Pkg.	Mfrs. List	W. E. List	W. E. List
No.		Pkg.	Pkg.	Wt.	per 100	Each	per 100
369	Metal to wood molding coupling	10	20	5 lbs.	\$15.00	\$0.30	\$25.20

### Strap Clamp

Schedule "R"

This strap has been especially designed for use with "National" Metal Molding where same is run over uneven surfaces upon which the capping has a tendency to spring away from the base.

It should not be confused with "National" Clamp No. 345 as no provision is made for fastening it to

the surface wired over and it consequently provides no support for the molding.

Li <b>st</b>		Unit	Std.	Std. Pkg.	Mfrs. List	W. E. List
No.		Pkg.	Pkg.	Wt.	per 100	per 100
425	Strap clamp, plainStrap clamp with screw hole	100	1000	10 lbs.	\$0.75	\$1.50
428		100	1000	15 lbs.	1.50	3.00





"Cone Head" Toggle

	"T Head" T	oggle			Sched	ule "R"
List No. 419 419 419	Size 1/8 x 4 in 1/4 x 4 in 1/4 x 4 in	Unit Pkg. 50 50 50	Std. Pkg. 100 100 100	Std. Pkg. Wt. 6 lbs. 6 lbs. 8 lbs.	Mfrs. List per 100 \$7.50 8.50 9.00	per 100 \$15.00
	"Cone Head"	Toggl	e		Sched	ule "R"
420 420 420	∄ x 2 in	100	500	5 lbs.	<b>\$</b> 3.00	\$6.00
420	$\frac{3}{12}$ x 3 in	100	500	7 lbs.	3.35	6.70
420	17 x 2 in 17 x 3 in 18 x 4 in	100	500	9 lbs.	3.70	7.40
	Note: No. 420 Toggle is arranged to pass through he	oles in "N	ational"	Metal Mo	lding base	without

Digitized by removal of toggle head.

Sherardized



No. 426 2 Line Suspension Strip



No. 414 Steel Armored Conductor Coupling



No. 427 3 Line Suspension Strip





Expansion Shield

### Suspension Strips

Schedule "R"

These suspension strips have been designed to permit the support of two or three parallel lines of "National" Metal Molding with one screw or bolt and are provided with screws for fastening the molding to them and with a hole for the introduction of a supporting screw or bolt.

List		Unit	Std.	Std. Pkg.	Mfrs. List	W. E. List
No.		Pkg.	Pkg.	Wt.	per 100	per 100
426	2 Line suspension strip	50	100	5 lbs.	\$4.00	\$8.00
427	3 Line suspension strip	20	50	5 lbs.	• 5.50	11.00

# Steel Armored Conductor Coupling

For connecting in combination with any fittings having "twist-outs," sizes 14 and 12 twin steel armored conductors and sizes 14 and 12 twin leaded or size 14-3 conductor leaded to metal molding.

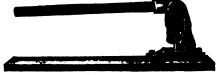
Steel armored conductor coupling...... 10 . 20 3 lbs. \$20.00

Cap Screw

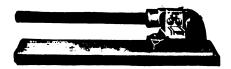
500 1000 2 lbs. \$25.00 Per 100 \$0.50

**Expansion Shield** 

421 Expansion shield..... 100 2 lbs. \$6.50 Per 100 \$13.00



No. 418



No. 422

# Lever Type Hand Punch

The "National" lever type punch is designed for accurate punching of the keyhole slot.

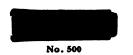
List No.		Unit Pkg.	Std. Pkg.	Std. Pkg. Wt.	Mfrs. List per 100	
418	Lever type hand punch	1	1	12 lbs.	\$32.50	<b>\$</b> 6.50

# Lever Type Hand Shear

The "National" lever type hand shear was designed for cutting the base and capping of "National" metal molding. Lever type hand shear..... Digitized 8/lbs. 0 \$27.50 1

15

### WIREMOLD



Wiremold has been designed to meet the demand for a surface wiring material which would be comparatively inexpensive, of small size, easy to install and which would require few fittings.

Its cost is the lowest consistent with a high grade metal surface raceway.

It is very neat and compact—just large enough for easy fishing of a pair

of 14's or 12's.

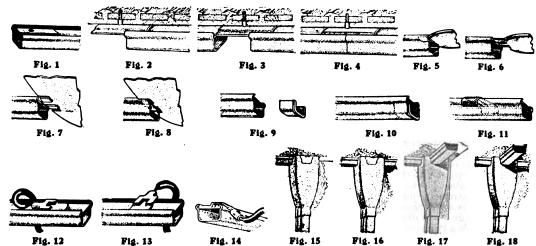
Its assembly and installation call for no special tools, slots, holes or screws—it is simply cut into lengths required and shoved over the coupling tongues of fittings.

Its fittings are few in number, are of simple design and arranged wherever possible for use with standard fittings and materials.

It is the first wiring material to be provided with a finish which blends with the color of the average wall upon which it is used—a neutral-toned enamel.

It is furnished complete with one coupling to each length, it goes up in one piece, it "fishes" and in many other ways works so much like conduit that no special experience is needed to install it.

List No.	Article	St'd. Pkd.		Prices	List No.	Article		Unit Pkg.	Prices	Lis'			Unit Pkg.	Prices	List No.	Article	Std. Pkg.	Unit Pkg	Prices
500	MOLDING	1000 Ft.		100 Ft. \$8.64 6.00	516	CROSS	1 00	5	Each \$0.36 .18	536	COVER FOR Nº 537-38	100	5	Each \$0.20 .10	561	IPUSH SWITCH COVER	100	1	Each \$0.40 .20
501	COUPLING	100	20	Each \$0.04 .02	517	6	100	5	.20	537	EXTENSION BOX	100	5	.60	562	PUSH SWITCH COVER	50	1	.80
502	D	100	20	.04	518	EXTERNAL ELBOW	100	5	.20 :10	538	4 FIXTURE BOX	100	5	.60	563	PUSH SWITCH COVER	25	1	1.20
503	CLIP	100	20	.04	519	CORNER BOX	100	5	. <b>36</b> .18	541	4% ROUND CANOPY BASE	100	5	.36 .18	571	STD ADAPTER COVER	100	1	.30
504	STRAP	100	20	.04	521	ONE PIECE ROSETTE	100	5	.40	542	6° ROUND CANOPY BASE	50	5	.56	572	STD ADAPTER COVER	50	1	.60
509	GROUND CLAMP	100	5	.08	522	TWO PIECE ROSETTE	100	5	.70 .35	543	4% SQUARE CANOPY BASE	50	5	.50 .25	573	STD ADAPTER COVER	25	1	1.00
511	NON-SPUCE TYPE 90" FLAT ELBOW	100	5	.20	523	FIXTURE ROSETTE	100	5	1.00	544	6' SQUARE CANOPY BASE	50	5	.70 .35	581	BOX CONNECTOR	100	4	.50
512	NONSPLICE TYPE 45" FLAT ELBOW	100	5	.20	525	RECEPTACLE BASE	100	5	.80	550	SHALLOW PUSH SWITCH BOX	50	1	.80	582	CONDUIT COUPLING	100	4	.70 .35
513	SPUCE TYPE 90° FLAT ELBOW	100	5	.24	531	COVER FOR NOS532-53	100	5	.20	551	SWITCH ADAPTER PLATE	100	1	.30	583	ELBOW BOX CONNECTOR V2 MALE	50	1	.60
514	SPLICE TYPE 45 FLAT ELBOW	100	5	.24	532	2'4 OUTLET BOX	100	5	.40 .20	552	2 GANG DE SWITCH ADAPTER PLATE	50	1	. <b>60</b> .30	584	CONDUIT ELBOW	50	1	.80
515	TEE	100	5	.30		3" OUTLET BOX	100	5	.50	553	3 GANG D 3 GANG D SWITCH ADAPTER PLATE	25	1	1.00	588	OPEN WORK COUPLING	100	5	.40



Wiremold, like rigid conduit, is furnished with one Base Coupling No. 501 to each length, as shown in

Fig. 1, but extra couplings must be used where short lengths are installed.

To install Wiremold, push the coupling forward until screw hole is clear and then fasten to wall with a No. 8 flat head wood screw as shown in Fig. 2. Slip the next length over edges of coupling, as shown in

Fig. 3, and close up as in Fig. 4.

Base plates of all Wiremold fittings of cross, tee and elbow types are provided with ribbed tongues, as in Fig. 5. In coupling, the tongues are slipped into the grooved edges of the molding, as in Fig. 6, either before or after the fitting has been screwed to the wall. Ribbed tongues are also cut in the base plate of fittings of the outlet box type, as in Fig. 7. Wiremold is coupled to such plates by slipping tongues into the grooved edges of the molding, as is illustrated by Fig 8, either before or after the plate has been screwed to the wall.

No 500 Molding Purking should be used wherever Wiremold enters fittings. It is slipped into the call.

No. 502 Molding Bushing should be used wherever Wiremold enters fittings. It is slipped into the end of Wiremold in manner illustrated by Figs. 9 and 10 and should be installed in all cases before molding is

assembled with fittings. It is locked tightly in place by the base plates of fittings.

No. 503 Supporting Clip is designed to support Wiremold in the middle of lengths of where tongues of fittings do not serve the purpose. It is secured to the wall with a No. 8 flat head wood screw and Wire-mold snapped into it, as shown in Fig. 11. The screw hole is slotted to allow clip to be adjusted to the line of the molding

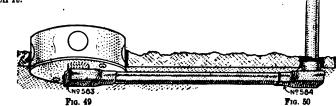
No. 504 Supporting Strap is designed for use where exceptionally rigid support is required.

No. 509 Ground Clamp is a standard, screwless ground coupling, and to install, the ground wire is first soldered into its lug. The coupling is then laid against the molding base in the position shown in Fig. 12, given a quarter turn to position shown by Fig. 13, and the lug bent down as in Fig. 14, which locks it firmly into the grooved edges of the molding capping.

Note that coupling must be in place before Wiremold is installed.

No. 519 Corner Box has been designed to provide in a single fitting for most of the corner combinations necessary where a run of Wiremold rises on the sidewall and must be turned and run close up in the corner on the ceiling or vice versa.

Fig. 15, for example, shows the box used as a twisted elbow, Fig. 16 as a twisted tee, Fig. 17 as another form of twisted tee and Fig. 18 as a twisted cross—these being only a few of the many combinations which can be secured with it.



No. 581 is a ½ inch box connector provided at one end with a tongue for coupling Wiremold and at the opposite end with a male hub having standard ½ inch conduit thread.

No. 582 is a ½ inch conduit coupling tapped at one end for standard ½ inch conduit and provided at the opposite end with a tongue for coupling Wiremold.

One-half inch elbow box connector No. 583 is equipped with a removable steel cover and has coupling tongue for Wiremold spaced far enough back from the threaded hub to allow ample fish room around the

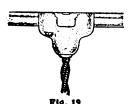
elbow.

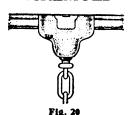
No. 585 ½ inch elbow conduit coupling differs from No. 583 in no particular save that its hub is tapped for standard ½ inch conduit instead of being furnished with male thread.

No. 583 is for use where an elbow coupling between Wiremold and some fitting having knockout for ½ inch conduit is necessary, as with outlet box shown in Fig. 49.

No. 584 is for use where a direct elbow coupling must be made between Wiremold and 16 inch conduit, as in Fig. 50, where molding is coupled with conduit to pass through ceiling to floor above.

### WIREMOLD





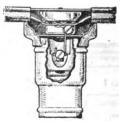


FIg. 21

Fig. 19 illustrates the use of Nos. 521 and 522 as standard drop cord rosettes.

Fig. 20 illustrates the use of No. 523 for hanging any small fixture having 1/8 inch stem.

Fig. 21 is an exploded view of No. 525 installed, showing circuit wires passing across the contact block and tap wires passing to the terminal lugs of a standard socket body.

These contact blocks are furnished complete with two tap wires and make installation of socket bodies on No. 525 extremely simple.

No. 521 is a one piece metal shell rosette equipped with standard porcelain bushing for drop cords.

It is 21/4 inches in diameter and has four twistouts for Wiremold entrance.

No. 522 is a two piece rosette identical with No. 521 save that it is equipped with contact block having

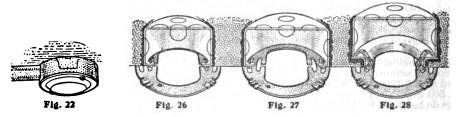
terminals for circuit and tap wires similar to block shown in Fig. 21.

No. 523 Fixture Rosette differs from No. 522 only in its bushing which is of insulating material and threaded for ½ inch fixture stems. It can be furnished with ½ inch bushing only.

No. 525 Receptacle Base is an insulated type steel receptacle base equipped with standard fluted ring

to permit sockets, ceiling switches and all similar fittings of fluted type to be mounted upon it.

It is 2½ inches in diameter, has four twistouts for Wiremold entrance and is provided with special easyto-wire contact block.



No. 531 is a 2½ inch blank cover designed for use with boxes Nos. 532 and 533 where they are used for junction purposes only, as illustrated in Fig. 22 above.

No. 532 is a 2½ inch outlet box designed primarily as a base for 5 ampere snap switches, but may also be used as an outlet box with Type G or H condulet and similar style covers.

No. 533 is a 3 inch outlet box designed primarily as a base for 10 ampere snap switches, but like No. 532, may also be used with many Type G or H condulet covers or those of similar design.

No. 536 is a 4 inch blank cover for use with boxes Nos. 537 and 538 where they are used for innerion.

No. 536 is a 4 inch blank cover for use with boxes Nos. 537 and 538 where they are used for junction

work only, as in Fig. 32.

No. 537 is a 4 inch extension box for use in extending with Wiremold from existing conduit outlets in the

manner shown in Figs. 26, 27 and 28, its base plate being arranged with special slots for the purpose.

Fig. 26 is a sectional view of 3½ inch conduit box and Fig. 27 of a 4 inch conduit box—both flushed into the wall—showing method of hanging base plate of No. 537 on their cover screws, in making extensions from such outlets with this fitting.

Fig. 28 illustrates the method of hanging base plate of No. 537 on standard open covers with the special clamps furnished for the purpose with No. 537.







No. 538 is a 4 inch fixture box primarily designed for use in hanging fixtures, but is also arranged for a number of other purposes, as shown by Figs. 29 to 34.

Where fixtures having round or square canopies larger than 4 inch are hung on No. 538, canopy rings Nos. 541, 542, 543 or 544 must be used.

Note that in addition to four twistouts for molding entrance, No. 538 has five knockouts for ½ inch conduit in its base arranged as in standard 4 inch conduit boxes.

Fig. 29 shows a conduit "pancake" box mounted on the surface and Fig. 30 shows "pancake" box removed and base plate of No. 538 substituted for it, thus indicating the ease with which Wiremold extensions may be made from "pancake" type outlets if the original box has been mounted on the surface.

Fig. 31 shows base plate of No. 537 installed at old knob and tube outlet preparatory to extension with

Wiremold.

#### WIREMOLD



Most fittings which can be mounted on 31/4 inch or 4 inch conduit boxes can also be mounted on Nos. 537 and 538. Fig. 32, for example, shows 31/4 inch blank cover on one of these fittings, Fig. 33 a 4 inch drop cord cover and Fig. 34 a large base surface receptacle of the size used for 31/4 inch concealed conduit outlets.

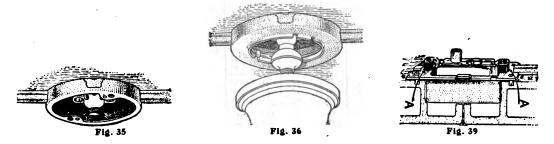


Fig. 35 illustrates the No. 538 Box installed complete with fixture stud ready to hang fixture.

Fig. 36 illustrates the method of assembling round canopy rings Nos. 541 and 542 with the No. 538 Box, which is done by simply bending back the four small ears of these rings to engage over the flange of the No. 538 Box.

The Nos. 543 and 544 square canopy rings are assembled with the No. 538 Box in the same way as the round canopy ring.

To install the No. 550, first cut a hold in the wall 2 inches wide, 3 inches long and 11/4 inches deep and mount the base of the No. 550 in it.

Then mount any standard push button switch on this base with the screws and spacer pieces furnished with each No. 550 for the purpose.

Next mount the No. 550 cover on the switch in the same manner ordinary flush switch plates are mounted, using cover screws furnished for the purpose with each No. 550.

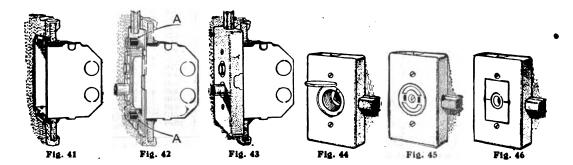


Fig. 41 is a sectional view showing a standard flush switch box installed in a wall in the usual manner. Fig. 42 shows the No. 551 Plate and any standard push switch mounted over the box shown in Fig. 41. Fig. 43 shows the assembly of push switch outlet complete with a No. 561 Cover.

Nos. 551, 552 and 553 are for use in coupling Wiremold with standard flush switch boxes in the manner

shown in Fig. 42.

Nos. 561, 562 and 563 are special push switch covers of standard type for use with the Nos. 551, 552 and 553 plates. These covers furnished in enamel finish only.

style of plate desired, as illustrated by Figs. 44, 45 and 46.

None of the above items are complete in themselves. An equal number of plates must be included in all cover orders.

The 560 series covers provide for installation of push switches with Wiremold, but where rotary switches or flush plug receptacles, as shown in Figs. 44, 45 and 46, are required the 570 series must be used together with the usual cover required for various types of attachment plugs or switches,  $\mathcal{I}(0)$ 

# Western Electric

# STANDARD CONDUIT



### Rigid Conduit

# Black Enameled and Galvanized Rigid Conduit

Mfr's. List price in effect August 1st, 1913. Weights and dimensions are nominal.

			CON	DUIT		1		CO	UPLI	NGS		E	LBOWS		
Size	Diam External	eters Internal	Thick- ness	Wt. Per Foot	Threads Per Inch	Std. Pkg.	Mfrs. Std. List Price Per Foot	Wt. Per 100 Lbs.	Std. Pkg.	Mfrs. Std. List Price Each	Wt. Per 100 Lbs.	Radius Inches	Offset Inches	Std. Pkg.	Mfre Std Lis Prio Eacl
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.540 .675 .840 1.050 1.315 1.660 1.900 2.375 2.875 3.500 4.500 5.563 6.625	.364 .493 .622 1.094 1.380 1.610 2.067 2.469 3.068 3.548 4.026 4.506 5.047 6.065	.247 .258	.425 .568 .852 1.134 1.684 2.281 2.731 3.678 5.819 7.616 9.202 10.889 12.642 14.810 19.185	18 18 14 14 11 11 11 11 11 8 8 8 8 8 8 8	100 100 100 50 50 30 10 10 10 10 10 10	\$0.08½ .06½ .05½ .11½ .17 .23 .27½ .37 .58½ .76½ .76½ 1.09 1.27 1.48 1.92	34.3 53.5 74.3 120.8	500 400 250 150 100 50 40	\$0.05 .06 .07 .10 .13 .17 .21 .28 .40 .80 1.00 1.50 1.65 2.40	42 53 75 120 200 300 427 700 1300 1700 2300 2700 3100 5500	4.250 4.250 4.250 5.375 5.750 7.250 8.250 9.500 10.500 13.000 15.000 16.000 18.000 24.000	7.500 7.500 7.375 8.375 9.500 10.875 12.625 15.250 17.375 19.500 21.250 22.500 24.375 32.000 39.750	200 150 125 100 50 25 20 15 10 8 6 4	\$0.19 .11 .12 .33 .44 .66 1.11 1.88 4.88 10.66 12.22 18.55,77 32.00

Tubes in 10 foot lengths, threaded both ends, with one coupling. Discounts and prices on special sises, bends and lengths on application.

### Conduit Sizes for Different Size Wires

No.	Circular	Amperes	8i	ze of Cond	uit	No	Circular	Amperes	Size	of Condu	it
B.deS.	Mils	Rubber	1 Wire	2 Wire	3 Wire	B.d.S.	Mils	Rubber	1 Wire	2 Wire	13 Wire
18 10 14 12 10 8 6 5 4 • 3 2 1 0 00 000 0000	1020 2583 4107 6530 10380 16510 26250 33100 41740 52630 66370 83690 105500 133100 167800 211600 200000 250000 3500000 3500000	3 6 12 17 24 33 46 54 65 76 90 107 127 150 277 210 200 235 270 330	K1999999999999999999999999999999999999	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11 14 14 14 14 14 14 14 14 14 14 14 14 1		500000 550000 650000 700000 750000 800000 950000 950000 1000000 1100000 1200000 1400000 1500000 1600000 1700000 1800000 1900000 1900000	390 420 450 475 500 525 550 575 600 625 650 690 730 770 810 890 930 930 970 1010	**************************************	3 14 3 14 3 14 3 14 4 4 4 4 4 4 4 4 4 4	3 ½ 4 4 4 4 ½ 4 ½ 5 5 5 6 6 6 7 7 7 7

Conduits in 10 foot lengths, threaded on both ends with one coupling. Conduit pipe is known and spoken of by its nominal inside diameter.

# Non-metallic Flexible Conduit



Flexible Conduit Conduit and Wiring Accessories

Size Inches	Feet in Coil	Wt. per 1000 Feet	Mfrs. Standard List per Foot	W. E. Liet Per 1000 Feet in Cell Lets
♣ (²/a)	250	50	\$0.053	\$5.50
<b>¼</b> (★)′	250	58	.06	6.90
<b>7</b>	250	75	.09	9.00
íš	200	90	.12	12.00
6,6	200	120	.15	15.00
<b>1</b> /4	150	196	.18	18.00
1	100	250	. 25	25.00
11/4	100	400	. 33	33.00
112	100	480	.40	40.00
1 %	100	590	.47	47.00
1 1/4 1 1/4 1 1/4 2	Odd lengths	800	. 55	55.00
21/4	Odd lengths	810	65 ∓	65.00
	ts on application.	Digitized b	y Google	2

### FLEXIBLE STEEL CONDUIT



Single Strip Conduit



**Double Strip Conduit** 

# Single Strip Type

This conduit is designed particularly for fireproof construction, but is equally adaptable to new non-fireproof work, or for the wiring of finished buildings.

It differs from the Double Strip Type in that it is formed with a single strip of galvanized steel, inter-

locked and gasketed in such a manner as to be highly suitable for concrete construction.

In ordering Single Strip Type always specify S. S. Type.

#### Data and List Prices

List No.	Nominal Inside Diameter in Inches	Approximate Outside Diameter in Inches	Weight per 100 Feet in Lbs.	Approximate Feet in Coil	List Price per 100 Feet
580388	**	.476	18	250	\$10.00
580389	3/8	.573	29	250	15.00
580390	3/2	.875	54	100	14.80
580391	3/4	1.062	68	50	19.24
580392	1	1.359	114	50	31.08
580393	11/4	1.625	138	50	38.48
580394	11/2	1.875	182	<b>25–50</b>	51.80
580395	2	2.375	<b>2</b> 52	<b>25–5</b> 0	6 <b>6.6</b> 0
580396	21/2	3.	280	25	76.96

# Double Strip Type

Where it is desired to make use of a conduit in existing buildings, we strongly recommend this Double Strip Type on account of its extreme flexibility. In ordering Double Strip Type of conduit always specify D. S. Type.

		Data and Lis	t Frices		
580397	*	.503	21	250	\$10.00
580398	<b>3</b> /8	.635	34	250	15.00
580399	1/2	.890	63	100	14.80
580400	3/4	1.166	<b>80</b>	50	19.24
580401	1	1.460	144	50	31.08
580402	11/4	1.782	176	50	<b>3</b> 8.48
580403	11/2	2.025	234	25-50	51.80
580404	2	2.520	277	25–50	66.60



**Armored Lamp Cord** 



Reinforced Armored Lamp Cord

# Flexible Armored Lamp Cord

Twin Conductors FSL

				List Price
List No.	Size	Approximate Feet per Coil	Weight per 1000 Feet	per 1000 Feet
580349 580350	No. 18 B. & S. No. 16 B. & S.	150-250 150-250	200 lbs. 210 lbs.	\$120.90 148.80
580351	No. 14 B. & S.	150-250	250 lbs.	213.90

# Flexible Reinforced Armored Lamp Cord

Twin Conductors FSRLC

580352	No. 18 B. & S.	150-250	245 lbs.	\$206:46
580353	No. 16 B. & S.	150-250	255 lbs.	232.50
580354	No. 14 B. & S.	150-250	Digitized by 100 lbs.	325.50

24 Conduit and Wiring Accessories

# ARMORED CONDUCTORS



Armored Conductors

# **Armored Conductors**

Armored conductors are designed for severe service and are built electrically and mechanically to meet these demands. The flexible lead covered armored conductors are moisture proof and will give satisfactory results when installed in moist places, such as packing plants, cold storage buildings, breweries, etc., and are also adaptable for underground work.

etc., and are	also adaptable for undergro	und work.	•• /	0 0,	•
•		gle Conductor	. Type S		
		• • • • • • • • • • • • • • • • • • • •	, , , , , , , , , , , , , , , , , , , ,	List Price	List Price
List		Approximate	Weight	per	per
No.	Size	Feet per Coil	per 1000 Feet	100 Ft.	1000 Feet
580309	No. 14, B. & S. Solid '	250	190 lbs.	\$12.20	\$113.46
580310	No. 12, B. & S. Solid	250	200 lbs.	14.20	132.06
580311	No. 10, B. & S. Solid	250	220 lbs.	18.00	167.40
580312	No. 8, B. & S. Solid	250	270 lbs.	21.20	197.16
580313	No. 6, B. & S. Solid	250	500 lbs.	29.00	269.70
580314	No. 10, B. & S. Stranded	250	220 lbs.	19.00	176.70
580315	No. 8, B. & S. Stranded	250	270 lbs.	23.00	203.90
580316	No. 6. B. & S. Stranded	250	500 lbs.	32.00	297.61
580317	No. 4, B. & S. Stranded	250	570 lbs.	41.00	381.83
180318	No. 2, B. & S. Stranded	200	690 lbs.	<b>53.20</b>	494.77
580319	No. 1, B. & S. Stranded	100	960 lbs.	63.00	<b>585.91</b>
	•	n Conductors,	Type FS		
500000		250	400 lbs.	\$20.80	\$193.44
580320	No. 14, B. & S. Solid	250 250	452 lbs.	27.00	251.10
580321	No. 12, B. & S. Solid	200 200	510 lbs.	37.00	344.10
580322	No. 10, B. & S. Solid No. 8, B. & S. Stranded	150	780 lbs.	47.00	437.11
580323 500224	No. 6, B. & S. Stranded	100	940 lbs.	74.00	688.22
580324 580325	No. 4, B. & S. Stranded	100	1210 lbs.	115.00	1069.52
000020	•			220101	2000.02
		e Conductors,		<b>607</b> 40	-050 00
580326	No. 14, B. & S. Solid	<b>25</b> 0	458 lbs.	<b>\$27</b> .60	\$256.68
58032 <b>7</b>	No. 12, B. & S. Solid	<b>250</b>	505 lbs.	34.00	316.21
580328	No. 10, B. & S. Solid	200	600 lbs.	47.00	437.11
580329	No. 8, B. & S. Stranded	150 1 <b>00</b>	862 lbs. 1160 lbs.	65.00 94.40	604.51 877.94
580320	No. 6, B. & S. Stranded	100	1100 108.	<b>51.10</b>	011.03
	Lead Cover	ed Armor	ed Conduct	ors	
	Sing	le Conductors	, Type SL		
580331	No. 10, B. & S. Stranded	<b>25</b> 0	460 lbs.	\$24.00	\$223.21
580332	No. 8, B. & S. Stranded	200	520 lbs.	29.00	269.70
580333	No. 6, B. & S. Stranded	200	790 lbs.	39.20	364.56
580334	No. 4. B. & S. Stranded	150	880 lbs.	49.80	463.15
580335	No. 2, B. & S. Stranded	150	1180 lbs.	63.80	593.35
580336	No. 1, B. & S. Stranded	100	1600 lbs.	<b>7</b> 7.60	721.69
_	Twit	Conductors,	Type FSL		
580337	No. 14, B. & S. Solid	100-200	647 lbs.	\$32.80	\$305.04
580338	No. 12, B. & S. Solid	100-200	693 lbs.	42.20	392.47
580339	No. 10. B. & S. Solid	100-150	900 lbs.	51.00	474.31
580340	No. 8, B. & S. Stranded	. 100-150	1210 lbs.	69.00	641.71
580341	No. 6, B. & S. Stranded	100	1900 lbs.	125.00	1162.53
000012	•	ree Conductor	- F9I 3		
500040		100-150	740 lbs.	\$44.40	\$412.93
580342	No. 14, B. & S. Solid	100-150	906 lbs.	58.00	539.41
580343	No. 12, B. & S. Solid	100-150	1040 lbs.	65.00	604.51
580344	No. 10, B. & S. Solid No. 8, B. & S. Stranded	190-150	1040 lbs.	90.00	837.02
580345	•			<b>5</b> 0.00	<u>.</u>
		Conductors,			
=00045			Marine Work	207 00	<b>6</b> 050 EA
580346	No. 14, B. & S. Solid	100-200	500 lbs. 580 lbs.	\$27.80 37.80	\$258,54 351,54
580347	No. 12, B. & S. Solid	100-200	620 lbs.	44.00 -1 -	409.21
580348	No. 10, B. & S. Solid	100-150	620 lbs. Digitized	by <b>G46.09</b> 5[e	******
Conduit and	Wiring Accessories	20	=	O	



# **FLEXIBLE CONDUIT FITTINGS**



Malleable Iron Box Connectors

### Sprague Box Connectors

				Weight	List	List
List	Description	Unit	Std.	Std.Pkg.		Price
No.	·	Pkg	. Pkg.	in Lbs.	Each	per 100
7118	10, 12, 14D, 16 and 18E Cord (½ inch knockout)	<b>5</b> 0	100	17	\$0.20	\$15.00
7119	inch D.S. Conduit; 8D, 16 and 18 EM Cord (1/2 inch					
	knockout)	50	100	16	.20	15.00
71191/2	For $\frac{5}{16}$ inch S.S. Conduit (½ inch knockout)	<b>5</b> 0	100	16	.20	15.00
7120	% inchS.S. and D.S. Conduit; 14BX, 12B1X, 4BX3 and					
	6D Cable; 14E and 14EM Cord (1/2 inch knockout)	50	100	12	.20	15.00
6121	For Nos. 12BX and 10BX, 14BX3, 12BX3, 14BXL,		•			
	14BXL3, 14 and 12BM, 4D and 6DL Cable (1/2 inch					
	knockout)	<b>5</b> 0	100	13	.20	15.00
6122	For Nos. 10BM, 12BXL, 12BXL3, 2D, 4DL and 2DL					
	and 10BX3 Cable (½ inch knockout)	50	100	15	.20	15. <b>00</b>
*7123	For Nos. 8BX, 8BX3, 10 and 8BXL, 10BXL3, 1D					
	Cable, and 1/2 inch S. S. and D. S. Conduit (1/2 inch					
	knockout)	<b>5</b> 0	100	17	.20	15. <b>00</b>
*6124	For Nos. 6BX, 8BXL3 Cable and 34 inch 8.8. Conduit					
	(3/4 inch knockout)	25	<b>10</b> 0	33	.23	19. <b>0</b> 0
*61241/2	For Nos. 4BX, 6BX3 and 6BXL Cable (1 inch knock-					
	out)	20	100	43	.35	<b>28.00</b>
*6125	For 1 inch S. S. Conduit (1 inch knockout)	20	100	39	.35	<b>2</b> 8. <b>00</b>
*6126	For 1½ inch S. S. Conduit (1½ inch knockout)	<b>2</b> 0	100	49	. 50	40.00
*6127	For 1½ inch S. S. Conduit (1½ inch knockout)	20	100	65	.75	60.00
*6128	For 2 inch S. S. Conduit (2 inch knockout)	10	50	48	1.00	80. <b>00</b>
*6129	For 2½ inch S. S. Conduit (2½ inch knockout)	5	25	43	2.25	180.00
*6131	For ¾ inch D. S. Conduit (¾ inch knockout)	25	100	31	.23	19.00
*6132	For 1 inch D. S. Conduit (1 inch knockout)	20	100	48	.35	28.00
*6133	For 11/4 inch D. S. Conduit (11/4 inch knockout)	<b>2</b> 0	100	53	. 50	40.00
*61331/2	For 1½ inch D. S. Conduit (1½ inch knockout)	10	<b>5</b> 0	48	.75	60.00
*6134	For 2 inch D. S. Conduit (2 inch knockout)	10	<b>5</b> 0	66	1.00	80.00
• Th	ese connectors are not of the stamped steel type, but	are	made of	malleable	iron of	the clamp

type and are furnished in hot galvanized finish.

Above prices include locknuts.



14 inch Socket Adapter
With Connector



% inch Socket Adapter
With Connector



Rosette Adapter With Connector

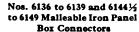
### Sprague Galvanized Adapters For Flexible Reinforced Cord Types "E" and "EM"

T:	Description	Unit	Std.	Weight Std.Pkg.	List Price	List
List	Description					Price
No.	•	Pkg.	Pkg.	in Lbs.	Each	per 100
7116	% inch socket adapter and squueze connector, nipple end with % in. thread, without locknut; will fit all standard % in. threads and Nos. 16 and 18E cord	50	100	12	\$0.20	\$15.00
7117	% in, socket adapter, same as above except that it will	•	200		<b>Q</b> 0.20	<b>\$10.00</b>
	accommodate 16 and 18EM cord	<b>5</b> 0	100	11	.20	15.00
7110	1/8 in. socket adapter fitted with No. 7116 3/8 in. socket adapter. Will take 16 and 18E cord	<b>5</b> 0	100	23	.44	35.00
7111	1/8 in. socket adapter, fitted with No. 7117 3/8 in. socket adapter. Will take 16 and 18EM cord	50	100	22	.44	35.00
7112	3/8 in. socket adapter, fitted with No. 7120 box con-	••				00.00
1112	nectors. Will take 14E cord	<b>5</b> 0	100	24	.44	35.00
7113	% in. socket adapter, fitted with No. 6121 box connector. Will take 14EM cord	50	100	26	.44	35.00
7114	Rosette adapter, fitted with No. 7116 % in. socket	00	100	20	.72	30.00
•	adapter. Will take 16 and 18E cord	50	100	24	. 54	43.00
7115	Rosette adapter, fitted with No. 7117 % in. socket					
	adapter. Will take 16 and 18EM cord	50	100	<b>2</b> 3	. 54	<b>42</b> .00
Aho	ve prices are for the Adapter only, and do not include c	onnect	OTS T	ist Nos 61	10 7120	and 6121

Box Connectors, shown above, are illustrated only for the purpose of showing their use.

# FLEXIBLE CONDUIT FITTINGS







Nos. 6135 and 6140 to 6144 Stamped Steel Panel Box Connectors



45° Connector Nos. 6190 and 6191



90° Connector Noc. 6192 and 6193

# Sprague Panel Box Connectors

For Greenfield Flexible Steel Conduit and Armored Cables-Galvanized Finish

List		**	G: 1	Weight	List	List
	<b>5</b>	Unit	Std.	Std. Pkg.	Price	Price
No.	Description	Pkg.	Pkg.	in Lbs.	Each	per 100
6135	For $\frac{1}{2}$ inch D. S. Conduit and Nos. 8BX3, 10 and					
	8BXL, 10BXL3 and 1D Cable (½ inch knockout).	25	100	27	\$0.37	\$30.00
<b>*</b> 6136	For 34 inch D. S. Conduit (34 inch knockout)	10	100	44	.40	32.00
*6137	For 1 inch D. S. Conduit (1 inch knockout)	10	100	61	.47	38.00
*6138	For 11/4 inch D. S. Conduit (11/4 inch knockout)	10	100	<b>7</b> 8	.62	50.00
*61381/2	For 1½ inch D. S. Conduit (1½ inch knockout)	10	50	58	.92	74.00
*6139	For 2 inch D. S. Conduit (2 inch knockout)	10	50	75	1.42	114.00
6140	For Nos. 14BX, 12BX, 14BX3 and 6D Cable. 14E		•	••		221.00
	Lamp Cord and 3/8 inch S. S. and D. S. Conduit (1/2					
	inch knockout)	50	100	19	.32	26.00
6141	For Nos. 10BX, 14 and 12BX3, 12BXL, 14BXL,	00	100	10	.02	20.00
0212	14BXL3, 14BM, 12BM, 4D and 6DL Cable (1/2					
	inch knockout)	50	100	23	.32	26.00
6142	For Nos. 10BX3, 12BXL3, 2D, 4DL and 2DL and	00	100	20	.02	20.00
0112	10BM Cable (1/2 inch knockout)	50	100	27	.32	26.00
6143	For ½ inch S. S. Conduit and Nos. 8BX, 8BX3, 10	00	100	21	.02	20.00
0140	and 8BXL, 10BXL3 and 1D Cable (1/2 inch knockout).	25	100	30	.32	96 00
6144	For 3/4 inch S. S. Conduit and Nos. 6BX and 8BXL3	20	100	<b>3</b> 0	. 32	26.00
0144	Cable (3/ inch lineshout)	20	100	411	45	20.00
*61441/2	Cable (¾ inch knockout)	20	100	41	.45	36.00
0144/2	For Nos. 4BX, 6BX3 and 6BXL Cable (1 inch knock-	10	100	20	4 80	00.00
*0145	out)	10	100	53	. 45	36.00
*6145	For 1 inch S. S. Conduit (1 inch knockout)	10	100	49	. 52	42.00
*6146	For 11/4 inch S. S. Conduit (11/4 inch knockout)	10	100	67	.75	60.00
*6147	For 1½ inch S. S. Conduit (1½ inch knockout)	10	50	48	1.00	80.00
*6148	For 2 inch S. S. Conduit (2 inch knockout)	10	50	50	1.38	108.00
*6149	For 2½ inch S. S. Conduit (2½ inch knockout)	5	25	45	2.50	200.00
• Th	ese connectors are not of the Stamped Steel Type, but are	made ·	of malle	able iron of	the Clar	тр Туре

and are furnished in a hot galvanized finish. Panel box connectors with an extra locknut may be used with cast-iron boxes having a wall thickness too great for the box connectors.

Above prices include locknuts.

# **Angle Box Connectors**

For Gree	enneld Flexible Steel Conduit and Armored Conduct	tors	-Malle	able Iron·	—Hot Ga	lvanized
	Finish			Weight	List	List
List		Unit	Std.	Std. Pkg.	Price	Price
No.	Description	Pkg.	Pkg.	in Lbs.	Each	per 100
6190	For Nos. 14BX, 12BX and 14BX3 Cable, 14E and 14EM Lamp Cord (½ inch knockout) 45 degree con-					•
	nector	20	100	28	<b>\$</b> 0.30	<b>\$24.00</b>
6191	For 1/2 inch S. S. and D. S. Conduit (1/2 inch knockout)					
	45 degree connector	20	100	31	.30	24.00
6192	For Nos. 14BX, 12BX, 14BX3 Cable, 14E and 14EM					
	Lamp Cord (1/2 inch knockout) 90 degree connector.	20	100	38	.30	<b>24</b> .00
6193	For $\frac{1}{2}$ inch S. S. and D. S. Conduit ( $\frac{1}{2}$ inch knockout)					
	90 degrees	20	100	44	.30	24.00
List	•		Std.	Wt. Std.	List Price	List Price
No.	Adapted for		Pkg.	Pkg.	Each	per 100
*6194	34 inch S. S. or D. S. Conduit (34 inch knockout) 45 degr	rees.	10	5	\$0.75	\$60.00
*6194A	34 inch S. S. or D. S. Conduit (34 inch knockout) 90 degr	rees.	10	8	.75	60.00
*195 1	inch S. S. or D. S. Conduit (1 inch knockout) 90 degrees.		10	9	1.50	120.00
*6196	11/4 inch S. S. or D. S. Conduit (11/2 inch knockout) 90 deg	rees	10	14	1.87	150.00
	11/2 inch S. S. or D. S. Conduit (11/2 inch knockout) 90 deg		10	19	2.50	200.00
60		•		Calac	ببدينية بالم	

\*Specify whether connector is wanted for S. S. or D. S. Conduit. This information is absolutely essential.

### FLEXIBLE CONDUIT FITTINGS

# Sprague Galvanized Couplings



Nos. 6160 to 6162 Nos. 6063 to 6067



Nos. 6072 to 6077 Combination Coupling Used to join Rigid Pipe to D. S. Flexible Steel Conduit or vice versa

	*Couplings	for D. S. and S. S. Condu	it 5	Inch to	½ Inch	Only	
List No. 16160 6162	Size of Conduit For A inch D. S. s	Description nd S. S. Conduit	Unit Pkg.	Std. Pkg. 100 100	Weight Std. Pkg. in Lbs. 18 52	List Price Each \$0.20 .23	List Price per 100 \$16.00 18.50
	*Co	uplings for D. S. Conduit	Large	than }	1nch		
†6062 6063	For % inch D. S.	Conduit	. 10	100 100	24 72	\$0.22 .30	\$17.00 24.00
6064	For 1 inch D. S. C	Conduit	. 10	100	121	.40	32.00
6065	For 1½ inch D. S.	Conduit	. 10	50	61	.55	44.00
6066 6067	For 1½ inch D. S.	Conduit	. 10	50 50	78 102	.75 1.07	60.00 86.00
	Combination Co	oupling for D. S. or S. S. wit	h Rig	id Cond	uit for ½	Inch only	
6072	For ½ inch D. S. o	r S. S. with Rigid Conduit	. 10	100	45	<b>\$</b> 0.31	\$25.00
	Con	nbination Couplings for D.	S. and	Rigid C	Conduit		
6073		and Rigid Conduit		100	74	\$0.40	<b>\$32.00</b>
6074		and Rigid Conduit		100	111	. 52	42.00
6075	For 11/2 inch D. S.	and Rigid Conduit	10	50	54	.75	60.00
6076 6077	For 2 inch D. S. For 2	and Rigid Conduit	10 10	50 50	$\begin{array}{c} 82 \\ 104 \end{array}$	1.00 1.50	80.00 <b>120</b> .00



Nos. 6163 to 6168 Couplings



Nos. 6173 to 6177 Combination Couplings

#### \*Couplings for S. S. Conduit

List	Size of	Unit	Std.	Weight Std. Pkg.	List Price	Price
No.	Conduit Description	Pkg.	Pkg.	in Lbs.	Each	per 100
†6161	For 3/8 inch S. S. Conduit	10	100	24	<b>\$</b> 0.22	\$17.00
6163	For 3/2 inch S. S. Conduit	10	100	73	.30	24.00
6164	For 1 inch S. S. Conduit	10	100	98	.40	32.00
6165	For 1½ inch S. S. Conduit	10	50	57	. 55	44.00
6166	For 1½ inch S. S. Conduit	10	50	67	.75	60.00
6167	For 2 inch S. S. Conduit	10	50	111	1.07	86.00
6168	For 2½ inch S. S. Conduit	5	10	39	1.87	150.00
	_					

#### Combination Couplings for S. S. and Rigid Conduit

6173	For % inch S. S. and Rigid Conduit	10	100	66	\$0.40	<b>\$</b> 32.00
6174	For 1 inch S. S. and Rigid Conduit	10	100	97	. <b>52</b>	42.00
6175	For 11/4 inch S. S. and Rigid Conduit	10	50	71	. 75	60.00
6176	For 1½ inch S. S. and Rigid Conduit	10	50	81	1.00	80.00
6177	For 2 inch S. S. and Rigid Conduit	10	50	101	1.50	120.00

\* In ordering couplings it is advisable to order one coupling to every coil of Greenfield Flexible Steel Conduit.

† These couplings are furnished with only two ears and two securance bolts.

### FLEXIBLE CONDUIT FITTINGS



Watertight Stuffing Bushing













Fish Plug





No. 6115 Dis-assembled

### Fish Plugs

These fish plugs, which are made for ¾ inch, ½ inch and ¾ inch Greenfield Conduit, will be furnished free on application, and will be found very useful in drawing in either D. S. or S. S. Type of conduit in finished buildings where it is desired to fish it under floors or in partitions.

After the conduit has been cut squarely off in the special vise, the fish plug may be screwed into the tube and the fish wire or drawing-in line should then be attached to the eyelet on the end of the plug.

# Watertight Stuffing Bushings

These bushings are made in two parts consisting of a male nipple having one end drilled out in a cup shape, and a hexagonal female clamping nipple having a clamp on one end which when screwed together securely holds the cable. The cable is inserted into the clamping nipple and the steam packing is then wrapped around the lead covering of the conductors. The male nipple is then screwed into the female clamping nipple which forces the steam packing into the cup-shaped space, also against the shoulder in the bottom of female clamping nipple making an absolutely watertight joint in the bushing.

				Wgt.	List	List
List		Carton	Std.	Pkg.	Price	Price
No.	Description	Quantity	Pkg.	Lbs.	Each	per 100
6106	Bushing for 14BXL and 12BXL Cable	. 20	100	<b>3</b> 6	<b>\$0.80</b>	<b>\$</b> 64.00
6107	Bushing for 14BXL3 and 12BXL3 Cable	. 20	100	36	.80	64.00
6108	Bushing for 10BXL and 10BXL3 Cable	20	100	<b>5</b> 9	1.05	84.00

# Insulated Brass Connectors

For Steel Armored Flexible Cord Type "E" These connectors are for use with Steel-Armored Flexible Cord as they thoroughly insulate the armor of the cord from the boxes and covers, also from the shell of the socket. They may be used in connection with box covers, sockets, rosettes, plug receptacles and attachment plugs.

Wgt. List Pkg. List Price Price Carton Std. No. Description Quantity Pkg. Lbs. Each per 100 Brass nipple for Hubbell attachment plugs Nos. 5815 and 6116 when used with No. 6115 bushing..... 6111 \$0.20 \$16.00 200 50 For Nos. 16 and 18 E Cord with 1/8 inch nipple locknut and 6113 35.00 200 13 50 For Nos. 16 and 18 Type E Cord..... .25 20.00 6115 50 200 10 Brass Cap for No. 6115..... 6118 4,00

# Mfrs. List No. Comparative Index on Metallic Conduit Fittings

Thomas	National		Thomas	National	1	Thomas	National	
&	Metal	10.00	&	Metal		&	Metal	
Betts	Molding	Pratt Chuck	Betts	Molding	Pratt Chuck	Betts	Molding	Pratt Chuck
580	2092			2187	6065-6165		2205	6146
253	2163	6120-6121		2188	6066-6166		2206	6147
201	2164	6122		2189	6067-6167		2207	6148
254	2166	6123-6130	230	2190	6070	265	2208	6190
255	2167	6124	231	2191	6073-6173	267	2209	6191
256	2169	6125	232	2192	6074-6174	266	2210	6192
257	2170	6126	233	2193	6075-6175	268	2211	6193
258	2171	6127	234	2194	6076-6176	250	2220	6115
259	2172	6128	235	2195	6077-6177		2220A	6115
	2182	6160	220	2200	6140-6141	·	2221	6115
	2183	6161		2201	6142	251	2222	6116
45	2184	6162	221	2202	6143-6135		2224	6117
	2185	6063-6163	222	2203	6144	L	2225	∂6117⅓ <u>-</u> 6118
	2186	<b>6064</b> -6164		2204	<b>6145</b>	gitized by	2226	6119

# FLEXIBLE CONDUIT FITTINGS AND CUTTERS



Nos. 6080-6084 Bushing for Armored Conductors



No. 6811 BX Armor Cutter Attached to Bench



No. 6812 BX Hand Armor Cutter

	Brass Terminal Bushings			Weight	List
List		Unit	Std.	Std. Pkg.	Price
No.	Description	Pkg.	Pkg.	in Lbs.	per 100
6080	For 14, 12 BX, and 14E Lamp Cord	10Ö	20Ŏ	8	<b>\$</b> 5.00
6081	For 14, 12 BX3 and 10 BX	100	200	7	9.50
6082	For 10 BX3	100	200	7	9.50
6083	For 8 BX	50	100	7	12.50
6084	For 8 BX3	50	100	7	13.50

	ъ.		
Lead	K110	nın	a a
LCau	Puo.		X O

			Weight	List	- 11				Weight	List
List	Size of	Std.	Std. Pkg.	Price	- 11	List	Size of	Std.	Std.Pkg.	Price
No.	Conduit	Pkg.	in Lbs.	per 100	li	No.	Conduit	Pkg.	in Lbs.	per 100
6040	3∕8 in.	100	1	<b>\$</b> 1.80	H	6043	1 in.	50	<b>2</b> '	<b>\$</b> 3.40
6041	$\frac{1}{2}$ in.	100	2	1.90	ll l	6044	1¼ in.	25	<b>2</b>	5.00
6042	8√ in.	50	2	2.60	ll l	6045	$1\frac{1}{2}$ in.	25	3	10.00
	. •				II.	6046	2 in.	25	4	15.00

### **Armor Cutters**

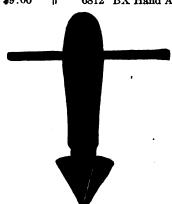
List		Wt.	List Price	List .	Wt.	List Price
No.		Lbs.	Each	No.	Lbs.	Each
6811	BX Armor Cutter	$8\frac{1}{2}$	<b>\$</b> 9.00	6812 BX Hand Armor Cutter	1	\$1.50



No. 6815 Bushing Tool



No. 6813



No. 6810 Reamer for S. S. Type of Flexible Steel conduit



No. 6814 Special Vise

Bushing Tools
For D. S. Type of Flexible Steel Conduit
Weight List || List No. 6815 Weight per 100 Weight per 100 List List Price per 100 Price Price Size in Lbs. Each Size in Lbs. Each Size in Lbs. Each 3/8 in. 1/2 in. 3/4 in. 19 \$0.60 156 \$1.00 20 \$1.50 1 in. 11/2 ins. 38 44 .60 11/4 ins. 13 1.50 ins. 1.50 106 .80

Tools for % inch to 1 inch inclusive, made of machine steel. Tools for 1½ inch to 2 inches inclusive, made of hard wood.

List No.		Cutters, Reamer Description		Weight Oz.	List Price Each
6813	Cord Armor Cutter	•••••		71/4	\$1.10
6810	Reamer			1/2	1.50
0814	Special Vise	• • • • • • • • • • • • • • • • • • • •	Digitized by	oggle	5.00
	51	26	Conduit a	and Wiring A	ccessories

### **CONDUIT FITTINGS**

# Bushings





	Unit	Std.	Weight	List Price
Size	Pkg.	Pkg. per	Std. Pkg.	per 100
½ inch	100	1000	45 lbs.	<b>\$</b> 7.20
3/4 inch	100	1000	60 lbs.	9.60
1 inch	100	1000	90 lbs.	15.00
1¼ inch		500	60 lbs.	20.00
$1\frac{1}{2}$ inch		200	30 lbs.	25.00
2 inch		100	20 lbs.	40.00
2½ inch		100	30 lbs.	45.60
3 inch		100	40 lbs.	68.40
3½ inch		25	14 lbs.	152.00
4 inch		25	20 lbs.	210.00
4½ inch		20	24 lbs.	280.00
5 inch		20	30 lbs.	350.00
6 inch		15	34 lbs.	420.00

### Locknuts



	Unit	Std.	Weight	List Price
Size	Pkg.	Pkg.	per Std. Pkg	. per 100
½ inch	100	5000	70 lbs.	\$3.76
3/4 inch	100	5000	128 lbs.	5.26
1 inch	100	1000	<b>4</b> 0 lb <b>s.</b>	7.20
1¼ inch		500	40 lbs.	12.00
$1\frac{1}{2}$ inch		250	30 lbs.	15.00
2 inch		100	16 lbs.	20.00
2½ inch		100	20 lbs.	30.00
3 inch		100		50.00
3½ inch		25	9 lbs.	<b>53.20</b>
4 inch		25	12 lbs.	76.00
4½ inch		20	15 lbs.	106.40
5 inch		20	18 lbs.	121.60
6 inch	• • • •	15	28 lbs.	152.00

# Squeeze Connectors

#### For Connecting Flexible Conduit to Outlet Boxes



Weight List List Std. per 100 Price List Price per 106 No. Size Pkg. Lbs. Each For ½ in. flexible conduit. 100
For ¾ in. flexible conduit. 100
For 1 in. flexible conduit. 50
For 1¼ in. flexible conduit. 50 254 9 \$1.53 \$10.80 255 14 2.04 14.40 25621.60 3.06 19 257 30.00 Price includes locknut.

#### **Hood Connectors**

#### For Connecting Flexible Armored Conductor to Outlet Boxes



**Armored Conductor Bushing** 

				Weight	List	List
List			Std.	per 100	Price	Price
No.	Size		Pkg.	Lbs.	Each	per 100
		For No. 14-2W armored conductor For No. 12-3W, 14-BXL-2W or	100	8	<b>\$</b> 0.13	\$9.00
	/8	14-BX-3	100	10	.13	9.00
		Price includes lockny	ŧ			

### G. V. Pipe Caps



G. V. Pipe Cap

List No. 1012 1034 1001 1114 1112	Size 1½ in. 3¼ in. 1 in. 1¼ in. 1½ in.	Each \$0.68 .85 1.24 1.68 2.08	List Price per Box \$6.40 8.00 10.00 9.00 10.00	No. 1212 1003 1312 1004 1006	Size 2½ in. 3 in. 3½ in. 4 in. 6 in.	Each \$5.44 7.36 9.86 11.64 38.40	List Price per Box 26.16 44.16 59.16 62.88 207.36
1002	2 in.	3.04	14.65		• •		200.00

14 and 11 inch put up ten in a box.

14 and 11 inch put up six in a box.

32

# Western Electric

# **CONDUIT FITTINGS**





Fish Wire

### Gas Elbows

List No.	List Price	
90	1/2 in. x 1/2 in. Gas Elbows.	\$40.00
91	1/2 in. x 3/2 in. Gas Elbows.	40.00
92	$3\frac{3}{8}$ in. x $3\frac{3}{8}$ in. Gas Elbows	40.00

### Fish Wire

This wire is regularly furnished in 100, 200, 250 and 300 feet lengths, but can be furnished in any length desired.

List No	0.	List Price p	er 100 Feet
1000	Fish Wire, 1/8 in. (standard size)		<b>\$</b> 4.00
1001	Fish Wire, 18 in		6.00
	Fish Wire, ¼ in		
1003	* more 1, 140		3.00





Nipples



Coupling

List Price

Pkg.

# Wrought Pipe Hooks

Size Black Finish			Wet.	per 100
3/8 in. pipe hook				\$8.00
½ in. pipe hook		. <b></b>	2¾ lbs.	8.00
3/4 in. pipe hook		<b></b>	$2\frac{3}{8}$ lbs.	12.00
1 in. pipe hook	<b></b>		$3\frac{1}{4}$ lbs.	16.00
1½ in. pipe hook			$4\frac{7}{8}$ lbs.	20.00
1½ in. pipe hook			$5\frac{1}{2}$ lbs.	24.00
2 in. pipe hook	<b></b> .			32.00
List Chase Nipples	Wgt. per	Std.	List Price	List Price
No.	Wgt. per 100 in lbs.	Pkg.	Each per	Std. Pkg.
840 ¼ in. nipples		100	Each per \$0.07	<b>\$4</b> .00

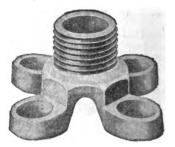
No.	Chase Hippics	100 in lbs.	Pkg.	Each	per Std. Pkg.
840	¼ in. nipples	2	100	\$0.07	\$4.00
841	3% in. nipples	3	100	.07	4.00
842	½ in. nipples	5	100	.07	4.00
843	3/4 in. nipples	6	100	.11	6.40
844	1 in. nipples	12	100	.21	12.00
845	1½ in. nipples	19	100	.25	14.40
846	1½ in. nipples	27	50	.28	8.00
847	2 in. nipples	45	50	.42	12.00
848	2½ in. nipples	68	25	.70	10.00
849	3 in. nipples	108	<b>25</b>	1.02	16.00
850	3½ in. nipples	122	20	3.50	40.00

830 831 832 833	1/4 in. coupling         3/8 in. coupling         1/2 in. coupling         3/4 in. coupling	4 5 7 10	100 100 100 100	\$0.08 .08 .08	\$4.80 4.80 4.80 7.20
	Standard gas pipe threaded.	Digiti	zed by	00916	1.20

# FIXTURE STEMS, BEAM STRAP AND FIXTURE HANGERS







Fixture Stem 1/4 Inch Hollow

Fixture Stem

### Fixture Stems

List			Std.	List Price	List Price
No.	Description	Finish	Pkg.	Each	per 100
1300	3/8 in. solid	Sherardized	10 <b>0</b>	<b>\$</b> 0.09	\$7.00
1301	½ in. solid	Sherardized	100	.12	9.50
1305	3/8 in. hollow	Sherardized	100	.085	6.60
1306	½ in. hollow		100	.11	9.00
-	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				

Packed in cartons containing 100 stems.

Enameled finish also furnished at same price as sherardized.

Stove bolts with nuts are not included in price of stems. Two bolts usually specified for each fixture stem.

2000 bolts with nuts for 1000 fixture stems, \$7 net.









No. 1326

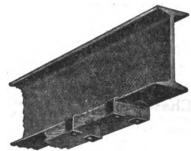
No. 1327 and 1325

# Conduit Bushing Adapters

List		List Price	List Price
No.	Sizes	Each	per 100
1325	34 in, male x 1/2 in, female	<b>. \$</b> 0.20.	\$18.00
1326	$\frac{1}{2}$ in. male x $\frac{1}{2}$ in. female	40	36.00
1327	1 in. male x ¾ in. female		<b>36.00</b>



No. 1316



Showing Application to Beam



Beam Strap

### Hickey Fixture Hangers

List		List Price	List Price
No.	Sizes	Each	per 100
1 <b>3</b> 15	3/8 in. male 1/2 in. female	<b>\$</b> 0.30	\$25.20
1316	$\frac{1}{2}$ in. male $\mathbf{x}$ $\frac{1}{2}$ in. female	30	25.20
1317	3/8 in. male x 3/4 in. female	30	25.20
1318	½ in. male x ¾ in. female	.30	<b>25.20</b>

# Beam Strap

List	-	Std.	List Price	List Price
No	Finish	Pkg.	Each	per 100
700			\$0.10	<b>\$</b> 6.52
	Deliment E O D Fratery Dittahungh De E warehou	ماموا مخاوس مونستونوالمام مم	wort house	

# Western Electric

### CONDUIT ACCESSORIES







Conduit Coupling

### Bendhick's Conduit Elbow

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	y	v	_

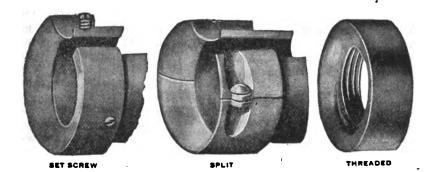
			List	1			List
List	Size	Std.	Price	List	Size	Std.	Price
No.	Conduit	Pkg.	Each	No.	Conduit	Pkg.	Each
L. ½	$\frac{1}{2}$ in.	100	\$0.96	L.1½	$1\frac{1}{2}$ ins.	<b>2</b> 0	<b>\$4.80</b>
L. 3/4	3/4 in.	100	1.12	L.2	2 ins.	10	9.60
L.1	1 in.	<b>5</b> 0	1.44	L.21/2	$2\frac{1}{2}$ ins.	4	12.80
L.11/4	1¼ ins.	24	4.00	L.3	3 ins.	4	16.00

# Erickson Conduit Coupling

Does away with running threads. Permits opening of conduit at any point.

					List
	Std.	Price		Std.	Price
Size	Pkg.	Each	Size	Pkg.	Each
½ inch	10 <b>0</b>	<b>\$</b> 0.45	1¼ inches	25	\$1.40
3/4 inch	50	.56	1½ inches	25	1.82
1 inch	25	79			

The above coupling furnished tinned or black at the same price.



# Krantz Porcelain Lined Bushings

#### Porcelain Lined Threaded and Set Screw Bushings

These bushings are a great convenience where it is found difficult to place a thread on the conduit. Size of Conduit,

Inches	1/2	3/4	1	11/4	11/2	2	$2\frac{1}{2}$	3	31/2	4
List Price each	<b>\$</b> 0.36	\$0.40	\$0.50	\$0.56	\$0.66	<b>\$</b> 0.78	\$1.08	<b>\$</b> 1.32	\$1.60	\$1.96
Standard Package	100	100	60	60	50	20	20	20	10	10

#### Porcelain Lined Split Bushings

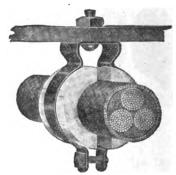
These bushings are designed to be used on conduits which have already been equipped with wire.

### Western Electric

### SUSPENSION HANGERS



Hanger Used Alone



Porcelain Bushing Used with Hanger

# Minerallac Cable and Conduit Hangers

These hangers are made of the best spring steel and are much stronger than cast iron hangers for the same purpose. They are easily and quickly put in place enabling great rapidity in running open wiring, conduit and cable. They are especially adapted for tile and beam work, as it is necessary to drill but one hole in surface wired over. These hangers are approved by the Underwriters' National Electric Association.

#### List Prices and Data

<b>.</b>	<b>7</b> 4070 W W	<b>~</b> .		meter	Approx.	<b>~.</b> 1	List
List	Size of 250-Volt	Size	of Op	ening	Wgt.	Std.	Price
No.	Lead-Covered Cable	Conduit	Min.	Max.	per Pkg.	Pkg.	per 100
0	3 cond. No. 14 to 7 cond. No. 14	3/8 in.	5∕8 in.	<del>}]</del> in.	4½ lbs.	100	\$10.36
1	No. 1 to 2-0	1/2 in. to 3/4	₹ in.	$1\frac{1}{16}$ ins.	7½ lbs.	100	11.40
2	No. 4-0 to 300M	1 in.	11/4 ins.	1 🛂 ins.	10 lbs.	100	15.36
3	500 M. to 750 M	$1\frac{1}{4}$ ins.	$1\frac{1}{2}$ ins.	1 <del>33</del> ins.	10 lbs.	100	16.36
4	800 M. to 1125 M	$1\frac{1}{2}$ ins.	13/4 ins.	1 <del>33</del> ins.	14 lbs.	100	20.26
5	1500 M	2 ins.	2 ins.	2 15 ins.	11 lbs.	50	21.76
6	2000 M. (3 cond. 4-0)	$2\frac{1}{2}$ ins.	21/4 ins.	3 ins.	12½ lbs.	50	24.36

Standard finish japan.

The above prices do not include stove bolts.

For galvanized add \$0.02 each.

# Porcelain Bushings

### For Minerallac Hangers

				Approx.		List
List	Size of 250-Volt	Diameter	of Opening	Wgt.	Std.	Price
No.	Rubber Covered Cable	Min.	Max.	per Pkg.	Pkg.	per 100
1	8-2-0	5 in.	<del>}}</del> in.	8 lbs.	100	\$12.60
2	3-0-4-0	5/8 in.	<del>33</del> in.	12 lbs.	100	14.40
3	250 M450 M	₹ in.	1 📆 ins.	13 lbs.	100	15.84
4	500 M700 M	11/8 ins.	1 🕺 ins.	22 lbs.	100	<b>18.36</b>
5	750 M1000 M	1 5 ins.	1½ ins.	14 lbs.	50	20.40
6	1125 M2500 M	1 👯 ins.	2 ins. Digit	14 lbs. tized b5 lbs.	9150	22.20
Con	duit and Wiring Accessories	30				

### CONDUIT FITTINGS



Jiffy Bushing Connector



No. 2 and 4 Universal Bushing



No. 911 Conduit Clamp



Conduit Hanger

### Jiffy Bushing Connectors

The Jiffy Bushing Connector is an absolutely new and original device for connecting metallic flexible conductors, sizes No. 14-2 wire, No. 14-3 wire, No. 12-2 wire. This bushing fits any round or straight edge box and always leaves a neat outside appearance. No inside locknut to adjust. The locking and grounding fingers are tempered and absolutely rust proof, giving not only a positive but a permanent ground jiffy, while its construction of a combination locknut and spring washer working on a saw-tooth thread gives the tightness and secureness demanded by inspectors and cannot work loose from vibration.

	List	Price-
	Each	Per 100
Jiffy Bushing Connector	\$0.20	\$12.00

# Universal Bushings

Universal Bushings are approved by the National Board of Fire Underwriters.

List		Std.	——List	Price-
No.		Pkg.	Each	Per 100
1	For $\frac{5}{8}$ in. knockout, $\frac{1}{4}$ in. and $\frac{5}{16}$ in. tubing	100	<b>\$</b> 0.06	\$4.50
2	For $\frac{1}{2}$ in knockout, $\frac{1}{2}$ in and $\frac{1}{2}$ in tubing	100	.07	5.26
3	For $\frac{5}{8}$ in. knockout, $\frac{7}{12}$ in. tubing	100	.06	4.50
4	For $\frac{7}{8}$ in. knockout, $\frac{7}{32}$ in. tubing	100	.07	5.26

# H and H Conduit Clamp

#### For Armored Conductor

Schedule H

You can run armored conduit into a 2 inch H and H shallow box by using the No. 911 H and H Conduit Clamp. It is very quickly and easily installed, takes up no room at all within the box.

List	,	Std.	Lis	t Price-
No.		Pkg.	Each	P er 100
911	Conduit Clamp	100	\$0.35	\$28.00

### Conduit Hangers

A one piece strap hanger made from ¾ inch and ¼ inch hoop steel, with four sharp V shaped reinforced prongs that are driven into the wood, instead of nails or screws.

List				List	Price
No.	Size	Weight	Length	Each	Per 100
<b>581464</b>	3∕8 in.	11 lbs.	4 ins.	\$0.10	<b>\$4</b> .50
581465	$\frac{1}{2}$ in.	11 lbs.	4 ins.	.10	4.50
581466	$\frac{3\sqrt{4}}{4}$ in.	11 lbs.	4 ins.	.10	4.50
581467	1 in.	11 lbs.	4 ins.	. 10	4.50
581468	1¼ ins.	14 lbs.	$4\frac{1}{2}$ ins.	. 10	4.68
581469	$1\frac{1}{2}$ ins.	14 lbs.	$4\frac{1}{2}$ ins.	. 10	4.68
581470	2 ins.	16 lbs.	5 ins.	.10	4.86
581471	2½ ins.	17 lbs.	5½ ins.	10	5.04
Packed	1 100 in a box.		Digitized by	oogie	

### CONDUIT OUTLET BOXES







No. FM

### Round Outlet Boxes

#### NO. YA CEILING BOX

Dimensions—3½ inches diameter, 5% inch deep. Outlets—8½ inch Circular Loom Outlets and one 34 inch Rigid Conduit Outlet in bottom.

		Mfrs.	W. E. List
List		List	Each
No.		per 100	Galv.
	Ceiling Box		\$0.28
IA	Caiming Dox	<b>411.00</b>	40.50

#### NO. ZA OUTLET AND RECEPTACLE BOX

Dimensions—3½ inches diameter, 1¾ inches deep.
8½ inch Circular Loom and 1¾ inch Rigid Conduit Knock-out in bottom.
4½ inch Circular Loom and 4½ inch Rigid Conduit Knock-out in the side.
Depth—1¾ inches. Screw holes spaced for all FA box covers.

		Mirs.	W. E. List
List		List	Each
No.		per 100	Galv.
	Receptacle Box	\$25.00	\$0.50
	2000p-uoi- =	•	•

#### NO. FM OUTLET BOX

Dimensions—3¼ inch diameter, ¾ inch deep; 3½ inch Outlets only in bottom. Outlets—3½ inch Rigid Conduit Outlets in bottom.

		Mfrs.	W. E. List
List		List	Each
No.		per 100	Galv.
	Outlet Box	\$18.00	\$0.36
		•	•



No. AA



No. BBA



Plate

### Round Outlet Boxes NO. AA ROUND OUTLET BOX

31/4 x 3/4 inches deep. No knock-outs in sides. 7 ¼ inch Circular Loom Knock-outs and 1 ¾ inch Rigid Conduit Knock-out in bottom. Screw-holes spaced for all FA box covers.

List No. AA	Round Box with Lugs	List per 100	Each Galv. \$0.36

### NO. BBA ROUND OUTLET BOX

3½ x ¾ inch deep. No Knock-outs in sides.
7½ inch Circular Loom Knock-outs and 1 ¾ inch Rigid Conduit Knock-out in bottom.
Screw holes spaced for all FA box covers.

List		Mirs. List	W. E. LIST
No.	Round Box without Lugs	per 100	Galv.
BBA		\$14.00	\$0 . 28

#### STEEL PLATE

580620 \$0.29 Steel Plate, 31/4 inches, no sides...... For enameled boxes deduct 10%.

### CONDUIT OUTLET BOXES AND COVERS







Mfre

No. FA

NO. EA RECEPTACLE BOX

For G. E. Receptacle No. 50746 and Bryant Receptacle Nos. 40507, 50744 and 50746

Dimensions—31/4 inches diameter, 15/8 inches deep. Outlets-Four outlets in sides.

Size Outlets—For ½ inch conduit only.

Note—Box cannot be furnished with bottom outlet.

		Mfrs.	W. E. List
List		List	Each
No.		per 100	Galv.
ËA	Round Receptacle Box		\$0.60
		•	<b>4</b>

#### NO. FA AND FAO RECEPTACLE BOX

Dimensions-31/4 inches diameter, 15/8 inches deep. Outlets—Four outlets in sides and one in bottom. Size Outlets-For 1/2 inch conduit only.

Fixture Stems—Boxes are drilled for fixture stems.

For Outlet and Junction purposes No. FA box with covers, FG and FH, can be used where a small box is necessary.

		141100	** · L. L.
List	•	List	Each
No.		per 100	Galv.
FA	Round Receptacle Box	<b>\$</b> 20.00	\$0.40
FAO	Octagon Receptacle Box	20.00	.40
		•	









Mfrs. W. E. List

WFI

No. ED

No. EB No. FB COVERS FOR 31/4 INCH ROUND BOXES

List No. ED	Flush Steel Cover	Finish Galv.	List per 100 \$10.00	Each Galv. \$0.20
$\mathbf{E}\mathbf{B}$	Flush Brass Cover		50.00	1.00
$\mathbf{E}\mathbf{E}$	Lapped Steel Cover		10.00	.20
EC	Lapped Brass Cover		54.00	1.08
FB	Steel Cover (Bryant No. 1508 Plug Receptacle)		10.00	.20
FE	Steel Cover Flush (G. E. Receptacle No. 9397)	Galv.	10.00	.20
FC	Polished Brass Cover		50.00	1.00





For enameled boxes deduct 10%.







No. FF

List No.

FD

FG

FH

F8

COVERS FOR 31/2 INCH ROUND BOXES

· • • • • • • • • • • • • • • • • • • •		Mfrs.	W. E. List
		List	Each
	Finish	per 100	Galv.
Steel Cover (lapped) G. E. Receptacle No. 9397	Galv.	\$10.00	<b>\$</b> 0.20
Polished Brass Cover (lapped)		<b>54.00</b>	1.08
Closed Steel Cover	Galv.	9.00	. 18
Open Steel Cover (Knowles Box Receptacle No. 2889) P. & S.			
Receptacles Nos. 61877, 61988 and 61577	Galv.	10.00	. <b>20</b>
Steel Cover, with % inch insulated bushing	Galv.	12.00	. 24
Polished Brass Cover, with 3/4 inch insulated bushing	0.00	56.00	1.12

# Western Electric

# **CONDUIT BOX COVERS**







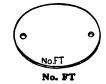
No. FP

### COVERS FOR 31/4 ROUND BOXES

			MIII8.	W. E.
List	•		List	List
No.		Finish	per 100	Each
FK	Cover, Steel for P. & S. Receptacles Nos. 61777 and 61977	Galv.	<b>\$</b> 10. <b>00</b>	\$0.20
$\mathbf{FL}$	Cover, Brass for P. & S. Receptacles Nos. 61777 and 61977		<b>5</b> 0. <b>00</b>	1.00
FO	Polished Brass Cover (lapped) for Federal Receptacles		<b>54.00</b>	1.08
$\mathbf{FP}$	Steel Cover (Flush)	Galv.	10.00	. 20
FN	Polished Brass Cover (Flush) for Federal Receptacles		<b>50.00</b>	1.00







### COVERS FOR 31/4 ROUND BOXES

T 1.A	00.000,000.000		Mfrs.	W. E.
List	·		List	List
No.		Finish	per 100	Each
$\mathbf{FQ}$	Flat Steel Cover, drilled for 5 Amp. Snap Switches	Galv.	\$12.00	\$0.24
$\mathbf{F}\mathbf{R}$	Snap Switch Steel Cover	Galv.	12.00	. 24
FT	Flat Brass Cover	••••	50.00	1.00









### **COVERS FOR 31/4 ROUND BOXES**

		Mirs.	W. C. LIST
List		List	Each
No.		per 100	Galv.
FU	Closed Steel Cover, 1/2 inch Knock-out Center	\$10.00	<b>\$0.20</b>
FV	Steel Cover for 1/4 inch bushing		. 20
FW		10.00	. 20
FY	Raised Steel Cover for Freeman Receptacle No. 140	12.00	.24
	For enameled boxes, deduct 10%.  Digitized by	ogle	
_		$\circ$	

### CONDUIT OUTLET AND JUNCTION BOXES







No. CAO

NO. CA OUTLET BOXES

Dimensions—4 inch diameter, 1% inches deep. Outlets—Four outlets in side and five in bottom. Size Outlets—For ½ inch or ¾ inch conduit only. Fixture Stems—Boxes are drilled for fixture stems.

		Mfrs.	W. E. List
List		List	Each
No.		per 100	Galv.
CA	Round Box	\$25.00	\$0.50
CAO	Octagonal Box	25.00	. 50

#### NO. DA OUTLET BOX

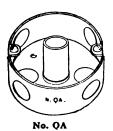
Dimensions—4 inches diameter,  $2\frac{1}{4}$  inches deep.

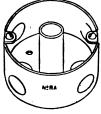
Outlets—Four outlets in sides and five in bottom.

Note: Size Outlets—For  $\frac{1}{4}$  inch,  $\frac{3}{4}$  inch and 1 inch conduit—No bottom outlets are provided in boxes arranged for 1 inch conduit.

Fixture Stems—Boxes are drilled for fixture stems.

		Mirs.	W.E.List
List		List	Each
No.		per 100	Galv.
DA	Round Box	<b>\$</b> 32.00	<b>\$</b> 0.64







No. RA

#### NOS. QA AND RA OUTLET BOXES For Combination Gas and Electric Fixtures

Dimensions—4 inches diameter; depth for brick work, 15% inches; for lath and plaster, 2½ inches.

Outlets—Four in sides and four in bottom for ½ inch pipe. Where ¾ inch pipe is used, box cannot be furnished with bottom outlets.

Center Nipple—Will pass 1/2 inch gas pipe.

		Mfrs.	W. E. List
List		List	Each
No.		per 100	Galv.
QA	Round box for brick, 15% inches deep	\$40.00	\$0.80
QA RA	Round box for lath and plaster, 21/4 inches deep	52.00	1.04

#### WA OUTLET AND JUNCTION BOX For Rigid and Flexible Conduits

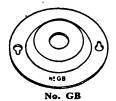
Dimensions—4 inches diameter, 1½ inches deep.
Outlets—21 outlets: 4½ inch knock-outs in side; 8 circular loom knock-outs in side; 6 circular loom knock-outs in bottom; 3½ inch knock-outs in bottom; drilled for fixture stems.

		Mfrs.	W. E. List
List		<ul> <li>List</li> </ul>	Each
No.		per 100	Galv.
WA	Round Box	\$25.00	\$0.50
	Digitized by	TOOLS	

For enameled boxes, deduct 10%.

# CONDUIT OUTLET BOXES AND COVERS







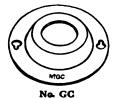
NO. GA RECEPTACLE BOX

For Norbitt, Trumbull, P. & S. and G. E. Receptacles

Dimensions—4 inches diameter, 15% inches deep. Outlets—Four side outlets only.

Size Outlets—For ½ inch or ¾ inch conduit only. No provision is made for fixture stems. Note—Box cannot be furnished with bottom outlets.

List No. GA	Round Box	Finish Galv.	Mfrs. List per 100 \$25.00	W.E. List Each \$0.50
	COVERS FOR 4 INCH ROUND BOXES	•		
GB GD GI GK	Steel Cover for No. C-33 1/8 Norbitt Rosette.  Brass Cover for No. C-33 1/8 Norbitt Rosette.  Steel Cover for G. E. Receptacle No. 9397.  Brass, for G. E. Receptacle No. 9397.	Galv.	\$14.00 62.00 14.00 62.00	\$0.28 1.04 .28 1.04

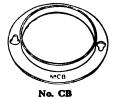


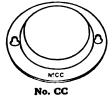




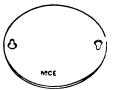
**COVERS FOR 4 INCH ROUND BOXES** 

Li <b>st</b> No.		Finisb	Mfrs. List per 100	W. E. List Each
GC	Steel Cover for C-227 Norbitt Receptacle, P. & S. Receptacles Nos. 61877, 61988 and 61577	Galv.	\$14.00	<b>\$</b> 0.28
GE	Brass Cover for C-227 Norbitt Receptacle, P. & S. Receptacles Nos. 61877, 61988 and 61577		62.00	1.04
$\mathbf{GF}$	Steel Cover for Trumbull Receptacle	Galv.	14.00	. 28
GG	Brass Cover for Trumbull Receptacle		<b>62.00</b>	1.04
$\mathbf{GL}$	Cover, Steel, for P. & S. Receptacles Nos. 61877 and 61988		14.00	. 28
GM	Cover, Brass, for P. & S. Receptacles Nos. 61877 and 61988		62.00	1.04









No. CE

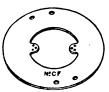
**COVERS FOR 4 INCH ROUND BOXES** 

List No.		Finish	Mars. List \ per 100	V. E. List Each
CB	Open Cover, Steel	Galv.	\$14.00	<b>\$0.28</b>
CC	Closed Cover, Steel	Galv.	14.00	. <b>28</b>
CM	Steel Closed Cover, with ½ inch knockout in center	Galv.	14.00	. 28
CD	Steel Cover, with 3% inch insulated bushing	Galv.	16.00	. 32
CK	Polished Brass Cover, with % inch insulated bushing		66.00	1.32
CE	Flat Steel Cover	Galv.	12.00	. 24
CL	Flat Polished Brass Cover		65.00	1.30

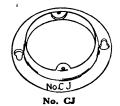
Drilling and tapping cover No. CE for any standard rosette, net extra, 10 cents each. For enameled boxes, deduct 10%.

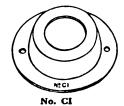
### Western Electric

# CONDUIT BOX COVERS



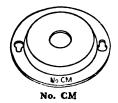


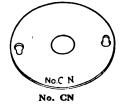


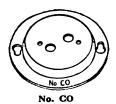


**COVERS FOR 4 INCH ROUND BOXES** 

List No.	•	Finish	Mfrs. List Per 100	W. E. List Each
CF	Flat steel cover drilled for standard 10 ampere snap switches	Galv.	\$16.00	\$0.32
CH	Polished brass cover "lapped" for Federal sockets		65.00	1.30
CJ	Open cover steel with lips drilled and tapped 3 inch	Galv.	14.00	. <b>28</b>
CI	Steel cover (flush) for Federal sockets	Galv.	12.00	.24
CG	Polished brass cover (flush) for Federal sockets	• • • • •	62.00	1.24

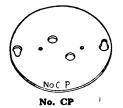


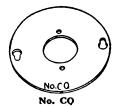


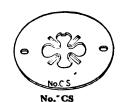


#### COVERS FOR 4 INCH ROUND BOXES

List	•	List	w. c. List
No.		Per 100	Each
CM	Closed cover, steel with ½ inch outlet in center	\$14.00	\$0.28
CN	Flat cover, steel 1/2 inch knockout in center	12.00	.24
CO	Closed cover, steel for G. E. Rosette No. 39237	14.00	. 28



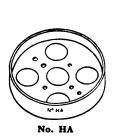


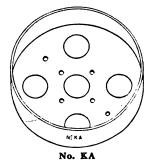


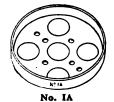
#### COVERS FOR 4 INCH ROUND BOXES

		Mfrs.	W.E.
List		List	List
No.		Per 100	Each
CP	Flat steel cover for G. E. Rosette No. 39237	\$14.00	\$0.28
CQ	Flat steel cover for P. & S. Receptacles Nos. 61777 and 61997	14.00	. 28
<b>C</b> 8	Flat steel snap switch cover.	14.00	. 28
For e	enameled boxes, deduct 10%.	10816	

### CONDUIT OUTLET BOXES







No. HA CEILING BOX

Dimensions—4 inches diameter, ¾ inch deep. Size Outlets—For ½ inch or ¾ inch conduit only. Fixture Stems—Boxes are drilled for fixture stems.

List No.	Mfrs. List per 100	W. E. List Each Galv.
HA Ceiling box	18.00	<b>\$</b> 0.32 .36
No. KA CEILING BOX		
Dimensions—5½ inches diameter, ¾ inch deep. Outlet—Five in bottom.		
Size Outlets—For ¾ inch conduit only.		
KA Ceiling box	30.00	.60
No. IA CEILING BOX		
Dimensions—4 inches diameter, ½ inch deep.		
Outlets—Five in bottom.		•
Size Outlets—For ½ inch or ¾ inch conduit only.		
IA Ceiling box	15.00	.30





#### No. A OUTLET BOX

#### For Combination Gas and Electric Fixtures

Dimensions—4-inch square, 1½ inches deep.
Outlets—Eight conduit outlets in sides and five in bottom.
Gas Outlets—One in each of two opposite sides for ½ inch gas pipe only.
Size Outlets—For ½ inch or ¾ inch conduit only.
Fittings—Boxes are drilled and tapped for gas elbows.

List No.	Mir. No.	Mfrs. List per 100	W. E. List Each Galv.
A	Square box	\$30.00	<b>\$</b> 0.60

#### No. BA SWITCH OUTLET OR JUNCTION BOX

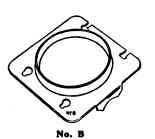
Dimensions—4 inch square, 1½ inches deep. Outlets—Eight outlets in side, five in bottom. Size Outlets—For ½ inch or ¾ inch conduit only.

Square box.... For enameled boxes, deduct 10%.

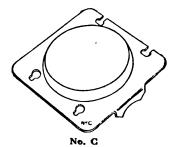
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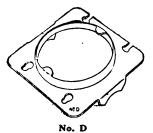
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# CONDUIT BOX COVERS



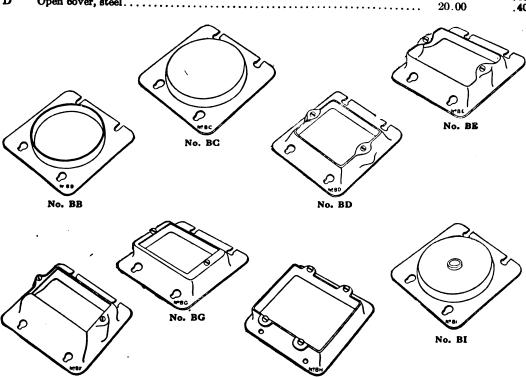
No. BF





COVERS FOR 4 INCH SQUARE BOXES

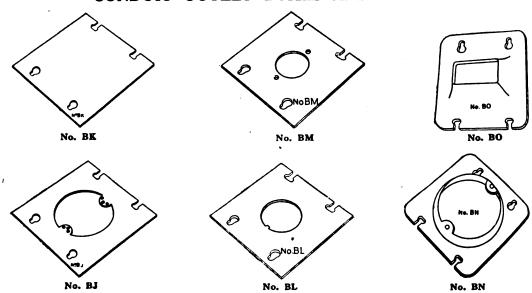
List		Mirs.	W. E. List
No.	•	List	Each
	0	Per 100	Galv.
Č	Open cover, steel	\$20.00	\$0.40
•	Clobed Cover, steel	90 00	.40
D	Open cover, steel	20.00	.40



List No.	COVERS FOR 4 INCH SQUARE BOXES	Mfrs. List Per 100	W. E. List Each Galv.
BB	Open cover, steel	\$14.00	\$0.28
BC	Closed cover, steel	14.00	.28
BD	Steel cover for Hart round base rotary switches	20.00	.40
BE	Steel cover for Perkins round base rotary switches	20.00	.40
BF	Deep Cover for Std. push button or rectangular base switches or flush		
	plug receptacles	20.00	.40
BG	Shallow Cover for Std. push button or rectangular base switches or flush		,
	plug receptacles.	25.00	. 50
BH	Cover for two push-button switches	18.00	.36
BI	Cover with 3% inch insulated bushing	20.00	.40
	For enameled boxes, deduct 10%.	0	

No. BH

### CONDUIT OUTLET BOXES AND COVERS

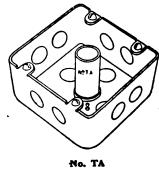


### **COVERS FOR 4 INCH SQUARE BOXES**

List No.		Mfrs. List Per 100	W. E. List Each Galv.
BJ	Flat Steel, drilled for Std. 10-ampere rotary snap switch	\$20.00	\$0.40
BK	Flat Steel Cover	14.00	. 28
	Drilling and tapping BK for any Std. receptacle, 10 cents each net extra		
BL	Flat Steel Cover for Federal Receptacles.	14.00	. 28
BM	Flat Steel Cover for P. & S. Receptacles Nos. 61777 and 61977.	14.00	. 28
BN	Steel, Open Cover with lips drilled and tapped A inch	12.00	.24
BO	French Cover, Steel.	45.00	.90







#### NO. SA AND TA OUTLET BOXES AND COVERS

#### For Combination Gas and Electric Fixtures

Dimensions—411 inches square; depth for brick work, 15% inches; for lath and plaster, 21/4 inches.
Outlets—Two in each of four sides and four in bottom for 1/2 inch conduit. When 1/4 inch conduit is used, box cannot be furnished with bottom outlets.
Center Nipple—Will pass 1/4 inch gas pipe.

Fixture Stems—Cannot be used with this box.  Nove—Box is carried in stock for 14 inch conduit only.	Mfrs.	W. E. List
List	List Per 100	Each Galv.
No.		
SA Box for brick, 1% inches deep	\$50.00	\$1.00
TA Box for plaster, 2½ inches deep	62.00	1.24
MC Steel Open Cover for above boxes	20.00	.40
ND Steel Open Lapped Cover for above boxes.	20.00	.40
For enamel boxes, deduct 10%.	OSIC	

# CONDUIT OUTLET BOXES AND COVERS





#### NO. MA OUTLET AND JUNCTION BOX

Dimensions—411 inches square, 15% inches deep. Outlets—Eight outlets in sides and five in bottom. Size outlets—For ½ inch or ¾ inch conduit only. Boxes are drilled for Fixture Stems.

		Mirs.	W. E. List
List	·	List	Each
No.		Per 100	Galv.
MA	Square Box	<b>\$4</b> 0.00	<b>\$0</b> .80

#### NO. NA DEEP OUTLET AND JUNCTION BOX

# For Lath and Plaster or Concrete

Dimensions—411 inches square, 21/4 inches deep.

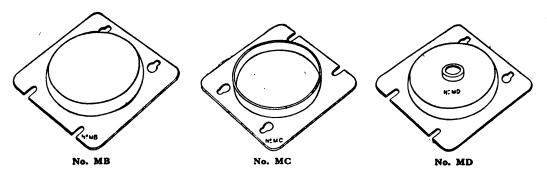
Outlets-Eight in sides and five in bottom.

Size Outlets—For 1/2 inch, 3/4 inch or 1 inch conduit only.

Boxes are drilled for Fixture Stems.

Note-No bottom outlets are furnished in boxes for 1 inch conduits

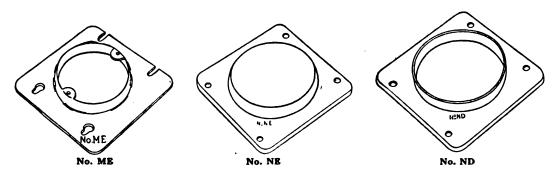
		MITS.	W. L. List
List		List	Each
No.	N. Control of the Con	Per 100	Galv.
NA	Square Deep Box for Plaster	\$50.00	\$1.00



# COVERS FOR 4H INCH SQUARE BOXES

		Mfrs.	W. E. List
List		List	Each
No.		Per 100	Galv.
MB	Closed Steel Cover	\$20.00	\$0.40
MC	Open Steel Cover	20.00	.40
MD	Steel Cover, with 3/8 inch insulated bushing	22.00	.44
For er	nameled hoves, deduct 10%	20010	

# **OUTLET BOXES AND COVERS**



COVERS	FOR	411	INCH	SOUARE	ROYES
CUVERS	LOK	- 17	114011	JUNKE	DUALS

		MILS.	W. C. LIK
List		List	Each
No.		per 100	Galv.
ME	Steel cover, with lips drilled and tapped	\$20.00	\$0.40
NE	Closed lapped cover, steel	20.00	.40
ND	Open lapped cover, steel	20.00	.40





# NO. UA BOX For Push-Buttons

Dimensions—211 inches long, 11/4 inches wide, 11/2 inches deep. Outlets—Two in bottom, one in each end and two in each side. Size Outlets—For 1/2 inch conduit only.

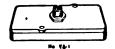
List			Mfrs. List <b>W</b>	. E. List
No.		Finish	per 100	Each
UA	Box	Galv.	\$25.00	\$0.50
UB	Brass cover for bell push-buttons		25.00	.50

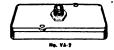
#### NO. VA BOX

#### For Exposed Conduit Work

Dimensions—3¾ inches long, 1¼ inches wide, 1¼ inches deep. Outlets—One in bottom, one in each end and three in each side. Size Outlets—For ½ and ¾ inch conduit only.

List		Mfrs. List	W. E. List Each
No.	•	per 100	Galv.
<b>VA</b>	Вож	\$25.00	\$0.50





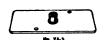




# PORCELAIN COVERS WITH NIPPLES For 3¾ x 1¼ Inch Boxes

List		Std.	List	W. E. List
No.		Pkg.	per 100	Each
VA1	Porcelain, 1/8 inch female nipple	200	\$40.00	\$0.80
VA2		200	40.00	.80
VA3		200	55.00	1.10
VA4		200	55.00	1.10
For en		ed by $G$	oogle	

# CONDUIT BOXES AND COVERS







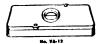




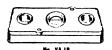
# METAL COVERS WITH NIPPLES

# For 3¾ x 1¼ Inch Boxes

List No.	•	Std. Pkg.	Mfrs. List per 100	W. E. List Each Galv.
VA5	1/8 inch female nipple	200	\$16.00	\$0.32
VA6	1/8 inch male nipple	200	16.00	.32
VA7	3/8 inch female nipple	200	20.00	.40
VA8	3/8 inch male nipple	200	20.00	.40
VA9	Metal cover blank	200	9.00	.18









# PORCELAIN COVERS

# For 3¾ x 1¼ Inch Boxes

List No.		Std. Pkg.	Mirs. List per 100	W. E. List Each
VA12	Porcelain, 1 hole	200	\$12.00	\$0.24
VA13 VA10	Porcelain, 2 hole	200 200	$12.00 \\ 12.00$	.24 .24
VA11	Porcelain, 5 hole	200	12.00	.24



#### GANG BOXES

Outlets—Two outlets on two opposite sides for each switch. Size Outlets—Boxes carried in stock for ½ inch and ¾ inch pipe.

Price list of boxes for push-button or rotary rectangular base switches and plug receptacles.

List No.		Mfrs. List per 100	W. E. List Each Galv.
	0.00-1-10		
580719	2 Standard 2 gang box	<b>\$</b> 90.00	<b>\$1</b> . 80
580720	3 Standard 3 gang box	135.00	2.70
580721	4 Standard 4 gang box	180.00	3.60
580722	5 Standard 5 gang box	235.00	4.70
580723	6 Standard 6 gang box	455.00	9.10
580724	7 Standard 7 gang box	730.00	14.60
580725	8 Standard 8 gang box	790.00	15.80
580726	9 Standard 9 gang box	880.00	17.60
580727	10 Standard 10 gang box	960.00	19.20

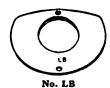
The above prices are for gangs placed in one row.

For enameled boxes, deduct 10%.

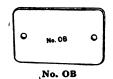


# CONDUIT OUTLET BOXES AND COVERS









## No. LA BRACKET OUTLET AND JUNCTION BOX

Dimension—3 1 inches diameter, 2 inches deep.

Outlets—Four in bottom, one in top side and two in flat side.

Size Outlets—For ½ inch and ¾ inch conduit only.

Boxes are drilled for fixture stems.

Li <b>st</b> No.		Mirs. List per 100	W. E. List Each Galv.
LA	Bracket outlet box	\$25.00	\$0.50
LB	Steel open cover for bracket box	12.00	.24
LC	Steel closed cover for bracket box	12.00	.24

Norm: No cover necessary with 4 inch canopy.

# No. OA BOX

# For Flush Rotary Snap Switches and Plug Receptacles

Dimensions—2 in inches wide, 4 inches long, 1% inches deep.

Outlets-One in each end, one in bottom, two on one side, one in opposite side.

Size Outlets-For 1/2 inch conduit only.

Note: These boxes designed for 2 inch partitions.

		Mfrs.	W. E. List
List		List	Each
No.	•	per 100	Galv.
OA	Box	\$25.00	\$0.50

For all Diamond H rectangular base rotary snap flush switches.

Hart and Hegeman rectangular base rotary flush snap switches, either 5 ampere or 10 ampere Nos. 600, 601, 602, 603, 604, 605, 609 and 619.

Hubbell plug receptacle.

Hart and Hegeman shallow flush push-button switches Nos. 2081, 2082, 2083, 2084; flush plug receptacle and shallow momentary contact push-button switch.

List No.	Mfrs. <b>W</b> List per 100	. E. List Each Galv.
OB Blank steel cover	\$12.00	\$0.24
For enameled boxes deduct 109		
	. ()	

# SWITCH BOXES

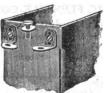
# "Union" Sectional Switch Boxes

"Union" Sectional Switch Boxes are equipped with reversible and sliding ears so as to be adapted to plastered or unplastered walls for old or new installation in buildings. All single boxes are furnished with one side removable which obviates the necessity of carrying gang boxes assembled in stock. By removing one side of the box, spacers can be inserted and the boxes built up to any desired number of gangs. The screw centers for attaching switches and flush receptacles are standard and accommodate all standard makes of push button flush and rotary flush switches and flush plug receptacles. These boxes are furnished with two styles of ears, "C" and "SF," as illustrated below. Unless otherwise specified, style "C" ears are regularly furnished.

# Styles of Ears



"C" Ear Regularly furnished on all Switch Boxes



"F" Ear Furnished only when specified



"SF" Bar Furnished only when specified

# FOR NON-METALLIC FLEXIBLE CONDUIT-1/8 INCH KNOCKOUTS Square Corners

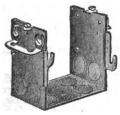
3 inches long, 2 inches wide.



"AA" Single

List No.	Description	Depth	Unit Pkg.	No. Per Case	Wt. Per 100	Mfrs. List Each	W. E. List Each
CCS CCS CCC CC CC AB AB AA AA	Single Gang. Two Gang. Spacer Single Gang. Two Gang. Spacer Single Gang. Two Gang. Two Gang. Two Gang. Two Gang. Spacer Single Gang. Two Gang. Two Gang.	2 ins. 2 ins. 2 ins. 2½ ins. 2½ ins. 2½ ins. 2¾ ins. 2¾ ins. 3 ins. 3 ins. 3 ins.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100 50 100 100 50 100 100 50 100 50	66 lbs. 101 lbs. 36 lbs. 79 lbs. 116 lbs. 42 lbs. 84 lbs. 125 lbs. 44 lbs. 91 lbs. 133 lbs. 47 lbs.	\$0.50 .90 .40 .60 1.10 .50 .50 .90 .40 .60 1.10	\$0.44 .88 .40 .48 .96 .44 .52 1.04 .48 .52

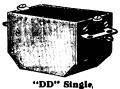
Black enameled finish regularly furnished. Sherardized furnished, when so specified, at slight increase in price.



"AA" Spacer

# FOR NON-METALLIC FLEXIBLE CONDUIT-1/4 INCH KNOCKOUTS Beveled Corners

3 inches long, 2 inches wide.





"DD" Spacer

List No.	Description	Depth	Unit Pkg.	No. Per Case	Wt. Per 100	Mfrs. List Each	W. E. List Each
DD DD DE DE DE DE	Single Gang. Two Gang. Spacer. Single Gang. Two Gang. Spacer.	2 ins. 2 ins. 2 ins. 2½ ins. 2½ ins. 2½ ins.		100 50 100 100 50 100	70 lbs. 96 lbs. 34 lbs. 73 lbs. 110 lbs. 40 lbs.	\$0.50 .90 .40 .60 1.10 .50	\$0.44 .88 .40 .48 .96

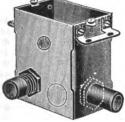
Black enameled finish regularly furnished. Sherardized furnished, when so specified, at slight increase in price.

# "AC" Single

"DC" Single



"DC" Spacer



"BB", Single



D. S. No. 1

# SWITCH BOXES "Union" Sectional Switch Boxes

# FOR METALLIC FLEXIBLE CONDUIT-1/2 INCH KNOCKOUTS

With Conduit Clamps—Square Corners

List No.	Description	Depth	Unit Pkg.	No. per Case	Wt. per 100	Mfrs. List Each	W. E. List Each
AC-Clamped	Single	3½ ins.	1	100	98 lbs.	\$0.60	\$0.60
AC-Clamped	Two Gang	3¼ ins.	1	50	154 lbs.	1.10	1.20
AC-Clamped	Spacer	3¼ ins.	1	100	56 lbs.	.50	. 56

Black enameled finish regularly furnished. Sherardized furnished, when so specified, at slight increase in price.

# FOR METALLIC FLEXIBLE CONDUIT-1/4 INCH KNOCKOUTS With Conduit Clamps—Beveled Corners

List No.	Description	Depth	Unit Pkg.	No. per Case	Wt. per 100	Mfrs. List Each	W. E. List Each
DC-Clamped DC-Clamped DC-Clamped		2½ ins. 2½ ins. 2½ ins. 2½ ins.	1	100 50 100	80 lbs. 112 lbs. 44 lbs.	\$0.60 1.10 .50	\$0.56 1.20 .56

Black enameled finish regularly furnished. Sherardized furnished, when so specified, at slight increase in price.

# FOR 1/2 INCH OR 1/2 INCH RIGID IRON CONDUIT

Square Corners

List No.	Description	Depth	Unit Pkg.	No. per Case	Wt. per 100	Mfrs. List Each	W. E. List Each
BB	Single	$3\frac{1}{2}$ ins.	1	100	102 lbs.	\$0.50	\$0.56
BB	Two Gang	3½ ins.	1	50	152 lbs.	.90	1.12
BB	Spacer	$3\frac{1}{2}$ ins.	1	100	50 lbs.	.40	.52
$\mathbf{BE}$	Single	$2\frac{3}{4}$ ins.		100	84 lbs.	.50	.52
$\mathbf{BE}$	Two Gang	$2\frac{3}{4}$ ins.	1	50	125 lbs.	.90	1.04
$\mathbf{BE}$	Spacer	$2\sqrt[3]{4}$ ins.	1	100	44 lbs.	.40	.48

Black enameled finish regularly furnished. Sherardized furnished, when so specified, at slight increase in price. In ordering specify whether desired for 1/2 inch or 3/4 inch conduit.

#### DOOR SWITCH BOXES

# For Non-Metallic Flexible, Metallic Flexible and Rigid Iron Conduit. Square Corners

These boxes are made in six types, D.S. No. 1, D.S. No. 2, D.S. No. 3, D.S. No. 4, D.S. No. 5 and D.S. No. 6. D.S. No. 1, D.S. No. 3 and D.S. No. 5 are made for loom or rigid conduit. Two 11 inch knockouts are provided for flexible, non-metallic conduit, and a knockout in one end for rigid ½ inch conduit. D.S. No. 2, D.S. No. 4 and D.S. No. 6 are made for flexible metallic and rigid conduit, having two holes ¼ inch in diameter, arranged with clamps for securely fastening the flexible conduit. A knockout for ½ inch conduit is also furnished.

D.S. No. 1 and D.S. No. 2 have switch screws on 3% inch centers and will accommodate Perkins, Arrow E or C-H switches. D.S. No. 3 and D.S. No. 4 have switch screws on 3% inch centers and are designed for Diamond H Switches. D.S. No. 5 and D.S. No. 6 have switch screws on 3% inch centers and are designed for H & H switches.

List	Description				Unit	No.	Wt.	Mfrs. List	W. E. List
No.	Description	Depth	Length	Width	Pkg.	Case	100	Each	Each
DS No. 1	Without Clamps	25/8 ins.	3% ins.	1 % ins.	1	100	65 lbs.	\$0.50	\$0.60
DS No. 2	With Clamps		3% ins.			100	69 lbs.	.65	.78
DS No. 3	Without Clamps	25/8 ins.	31/4 ins.	1 % ins.	1	100	63 lbs.	.50	.60
DS No. 4	With Clamps	25% ins.	31/4 ins.	1 3/6 ins.	1	100	67 lbs.	.65	.78
	Without Clamps	3 ins.		1 % ins.		100	61 lbs.	.50	. 60
DS No. 6		3 ins.	3 ins.	1 % ins.	1	100	65 lbs.	.65	.78

Black enameled finish regularly furnished. Sherardised furnished, when so specified, at slight increase Digitized by Google in price.

# **SWITCH BOXES**

# "Union" Sectional Conduit Switch Boxes

# FOR FLEXIBLE OR RIGID CONDUIT









No. 155 No. 160

No. 160 Spacer

2 Gang Plate Cover

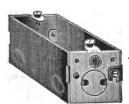
### **DEEP TYPE**

# For Push Button, Rotary Flush Rectangular Base Switches and Receptacles

This type box is made in two styles, No. 155 single gang, and No. 160 two gang. Style No. 155 has room for making splices, taps and junctions. Either of the small top covered plates may be removed by loosening the screws, thus permitting access to the wires without disturbing switch. A spacer is provided which may be used in connection with type No. 160 to build up a gang box of any desired capacity. Conduit openings for either ½ or ¾ inch are provided in each of the four sides of these boxes. Spacers have but one outlet in each end and can be inserted without removing screws. By equipping above boxes with flat steel covers a junction or cut-out box is provided, which will accommodate single and double main line cut-outs.

List	Description	Dimensions			Unit	No.	Wt.	Mfrs. List	W. E. List
No.	·	Length	Width	Depth	Pkg.	per Can	per 100	Each	Each
155 160	Single Box	53/4 ins.	4 ins. 4 ins.	25% ins. 25% ins.	1	100 100	152 lbs. 186 lbs.	\$0.34 .60	\$0.48 .86
160 	SpacerSingle Cover						44 lbs.	.26 .10 .12	.14
• • • •	Double Cover Triple Cover							.12	.18 .22

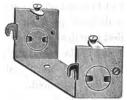
Black enameled finish regularly furnished. Sherardized furnished, when so specified, at slight increase in price.



No. 170 Single Box



No. 170 2 Gang



No. 170 Spacer

# SHALLOW TYPE For All Makes of Shallow Switches

No. 170 sectional combination loom and conduit box is particularly adapted for thin partitions and outside wall work and will accommodate all makes of shallow switches. It is 1% inches in depth. End and bottom outlets are provided for ½ inch conduit. Two outlets on either side take loom or ¾ inch flexible conduit. Spacers are provided by means of which two gang boxes may be built up to accommodate any number of switches desired. Boxes are made in two types, No. 170 without ears, and No. 170A with ears. No. 170 spacer cannot be furnished with ears. Boxes may be used as junction boxes with flat steel covers illustrated at top of page.

List	D	Dimensions				No.	Wt.	Mfrs. List	W. E.
No.	Description	Length	Width	Depth	Unit Pkg.		per 100	Each	List Each
170	Single Box	4 ins.	2 ins.	17/8 ins.	1	100	72 lbs.	\$0.20	\$0.20
170	Two Gang Box	4 ins.	$3\frac{13}{16}$ ins.	1 1/8 ins.	1	100	106 lbs.	.38	. 38
170	Spacer	4 ins.	1 13 ins.	1 % ins.	1	100	36 lbs.	.18	.18
170A	Single Box-with ears	4 ins.	2 ins.	17/8 ins.	1	100	76 lbs.	.30	. 30
170A	Two Gang Box-with ears	4 ins.	$3\frac{13}{16}$ ins.	17/8 ins.	1	100	110 lbs.	.54	. 54
	Single Cover				1			.10	.10
	Double Cover							.12	.12
	Triple Cover				1			.15	.16

Black enameled finish regularly furnished. Sherardized furnished, when so specified, at slight increase in price.

# Western Electric

# SWITCH BOXES





Gem Box Type B

# "Gem" Sectional Switch Boxes

The "Gem" Sectional Switch Box is for use with non-metallic, flexible and rigid conduit. They take all makes of push button and rectangular base switches and receptacles. The assembling can be done quickly by the use of no other tool than the screw driver. It is impossible to put the box together in any way except the right way, as all sides are interchangeable.

Construction. The fastening is made by a hook which drops into a notch in the body of the box in such a way that when the side plate is brought to position and the single screw set at its opposite end, both ends are absolutely firm against movement in any direction. The "Gem" box is regularly furnished with type "C" ear, reversible, having an adjustment from  $\frac{1}{32}$  inch to  $\frac{3}{4}$  inch. Ear extends  $\frac{1}{2}$  inch from body of box and affords ample room for setting screws firmly into lath or mounting board. The D and E are designed particularly for the rewiring of old buildings. The beveled corners permit insertion into the smallest practical opening in the walls and make the "fishing" of the ends of flexible conduit into the box very easy. The type B,  $2\frac{3}{4}$  inches deep, is designed for switch and receptacle casings in concealed conduit or armored cable work—takes  $\frac{1}{2}$  inch and  $\frac{3}{4}$  inch conduit and may be used where a larger flexible tubing than  $\frac{1}{2}$  inch is desired.

#### List Prices and Data

			Knockout	List No.	Mfrs.	W. E. List	Lis <b>t</b> No.	Miles	W. E. List Unit With-
Туре	Depth	Corners	Inches	Box	List	Box	Unit	Mfrs. List	out Sides
Gem S	2 ins.	Square, for loom	5/8	581146	<b>\$</b> 0.50	\$0.44	581184	\$0.40	\$0.40
$\operatorname{Gem} \mathbf{C}$	$2\frac{1}{2}$ ins.	Square, for loom	5/8	581147	. 50	. 48	581185	.40	.44
Gem A	3 ins.	Square, for loom	5/8	581179	. 50	. 52	581186	.40	. 48
Gem D	2 ins.	Beveled, for loom	5/8	581180	.60	.44	581187	.50	.40
$\mathbf{Gem}\;\mathbf{E}$	$2\frac{1}{2}$ ins.	Beveled, for loom	5/8	581181	.60	.48	581188	.50	.44
Gem F	$2\frac{1}{4}$ ins.	Beveled, for loom	5/8	581460	.60	.44	581462	.50	.40
Gem B	$2\frac{3}{4}$ ins.	Square, for rigid							
		conduit	½ or ¾	581182	.50	. 52	581189	.40	. 48
Gem X	$2\frac{1}{2}$ ins.	Square, with clamps for flex-							
		ible conduit	11	581183	.60	. 56	581190	.50	. 52
Gem Y	3 ins.	Square, with clamps for flex.					Can	ج آ ء	
		metallic cond	13 13	58146 <b>1</b>	.60	Digiti <b>z60</b> b	y <b>581463</b>	<u>SI</u> (30	. 56
Conduit	and Wirin	g Accessories		48-1					

# "H & H" WALL CASES



No 901



No. 901 Showing Ears Reversed



No. 902



# Wall Cases

The ears used in mounting the wall cases are reversible, as shown in the illustration, and the wall cases can be set flush in the walls that have already been plastered, or they can be mounted on the laths in walls not yet plastered, and in this latter case the ears have to be reversed. When specified, wall cases will be

shipped with ears reversed.

There are two screw slots in the ears so that in "new work" the wall case can be adjusted for the pro-

posed thickness of the plaster.

Knockout outlets for non-metallic flexible conduit are provided as follows: Four outlets in the bottom

for  $\frac{1}{2}$  inch conduit, two at each end for  $\frac{1}{2}$  inch conduit.

All "H & H" wall cases are made in two depths of  $2\frac{1}{16}$  inches, and  $2\frac{3}{4}$  inches, and can be furnished in horizontal or tandem gangs.

		SHALLC	Schedule "H"				
List No.		Style	Dimensions Inches	Std. Pkg.	Pkg. Wt. Lbs.	Mfrs. List Each	W. E. List Each
901	For One Switch	Horizontal	2 $x 3 x 2 \frac{1}{16}$	*	74	<b>\$</b> 0.25	\$0.45
902	For Two Switches	Horizontal	3 t x 3 x 2 t	*	65	.50	.90
903	For Three Switches	Horizontal	$5\frac{5}{8} \times 3 \times 2\frac{1}{18}$	*	62	.75	1.35
904	For Four Switches	Horizontal	$7\frac{7}{16} \times 3 \times 2\frac{7}{16}$		65	1.00	1.80
905	For Five Switches	Horizontal	$9\frac{1}{4} \times 3 \times 2\frac{1}{16}$	*	65	1.25	2.25
906	For Six Switches	Horizontal	$11\frac{1}{16} \times 3 \times 2\frac{1}{16}$	•	65	1.50	2.70
907	For Seven Switches	Horizontal	$12\frac{7}{8} \times 3 \times 2\frac{1}{16}$	*	65	1.75	3.05
908	For Eight Switches	Horizontal	$14\frac{11}{16} \times 3 \times 2\frac{1}{16}$	*	65	2.00	3.60
912	For Two Switches	$\mathbf{Tandem}$	$2\frac{1}{8} \times 6\frac{5}{8} \times 2\frac{1}{16}$	*	75	. 50	.90
913	For Three Switches	Tandem	$2\frac{1}{8} \times 10\frac{1}{4} \times 2\frac{1}{16}$		75	.75	1.35
914	For Four Switches	Tandem	$2\frac{1}{8} \times 13\frac{7}{8} \times 2\frac{1}{16}$	*	75	1.00	, 1.80
915	For Five Switches	Tandem	$2\frac{1}{8} \times 17\frac{1}{2} \times 2\frac{1}{16}$	*	75	1.25	2.25
916	For Six Switches	Tandem	$2\frac{1}{8} \times 21\frac{1}{8} \times 2\frac{1}{16}$	*	75	1.50	2.70
		DEEP	WALL CASES			Sche	dule "H"
3031	For One Switch	Horizontal	$2 \times 3 \times 2\frac{3}{4}$	•	94	<b>\$</b> 0.28	\$0.50
3032	For Two Switches	Horizontal	3 to x 3 x 2 %	•	84	. 56	1.00
3033	For Three Switches	Horizontal	$5\frac{5}{8} \times 3 \times 2\frac{3}{4}$	*	84	. <b>82</b>	1:58
3034	For Four Switches	Horizontal	$7\frac{7}{16} \times 3 \times 2\frac{3}{4}$	*	84	1.08	1.95
3035	For Five Switches	Horizontal	$9\frac{1}{4} \times 3 \times 2\frac{3}{4}$	*	85	1.34	2.40
3036	For Six Switches	Horizontal	$11\frac{1}{16} \times 3 \times 2\frac{3}{4}$	*	. 85	1.60	2.88
3037	For Seven Switches	Horizontal	$12\frac{7}{8} \times 3 \times 2\frac{3}{4}$	*	85	1.84	3.30
3038	For Eight Switches	Horizontal	$14\frac{11}{18} \times 3 \times 2\frac{3}{4}$	*	85	2.10	3.98
3042	For Two Switches	Tandem	$2\frac{1}{8} \times 6\frac{5}{8} \times 2\frac{3}{4}$	•	95	.56	1.00
3043	For Three Switches	Tandem	$2\frac{1}{8} \times 10\frac{1}{4} \times 2\frac{3}{4}$	*	95	.82	1.58
3044	For Four Switches	Tandem	$2\frac{1}{8} \times 13\frac{7}{8} \times 2\frac{3}{4}$	•	95	1.08	1.95
3045	For Five Switches	Tandem	$2\frac{1}{8} \times 17\frac{1}{2} \times 2\frac{3}{4}$	•	95	1.34	2.40
3046	For Six Switches	Tandem	$2\frac{1}{8} \times 21\frac{1}{8} \times 2\frac{3}{4}$	<b>∔</b> Diai	95 C	,000le	2.88

# CUTTER STEEL BOXES

# Service and Cut-out

# Western Electric

# Specifications

The following specifications apply to all Cutter cut-out boxes:

Cutter steel service and cut-out boxes are formed up from a single piece of sheet steel and electrically welded. There are no rivets to work loose. Finished with high-grade black enamel paint.

Underwriters' label on every box-approved by the National Board of Fire Underwriters.

Four 16 inch holes, one inch from each corner, for fastening cabinet in place.

#### Stock Cut-out Boxes

The following specifications apply only to stock cut-out boxes listed below and cannot be changed.

Made of No. 16 U. S. G. steel.

Doors overlap boxes on all four sides and are hinged on right-hand side. Furnished with 1/8 inch knockouts for 1/2 inch conduit pipes.

Made for surface mounting.

Large quantities in stock for prompt shipment.

#### Mfrs. List Prices of Stock Cut-out Boxes. Special Discounts on Application

		List Price Each				
Width Inches	Length Inches	3 Inches Deep	4 Inches Deep			
4	6	\$0.55	•			
4	8	.60	\$0.80			
4	10	•	.80			
6	6	.65	.75			
6	8	.70	.80			
6	10	.80	.90			
6	12	•	1.00			
8	8	.80	.90			
8	10	85	1.00			
8	12	. 95	1.10			
8	16	•	1.30			
10	10	1.00	1.10			
10	12	<b>1.10</b>	1.25			
10	16	•	1.45			
10	18	•	1.55			
12	12	•	1.35			
12	16	•	1.60			
12	18	•	1.70			

Special size 4½x9x3½ inches, hinged on top, list price, \$0.60.

This box only hinged on top, all others are hinged on right-hand side.

Std. pkg. is five of one size.

\*Not carried in stock. See price list on following page.

# Made to Order Cut-out Boxes

Boxes listed on the following page are not regularly carried in stock, but are made to order. The follow-

ing specifications apply:
Unless otherwise ordered, boxes will be furnished with standard % inch knock-outs for ½ inch conduit
Unless otherwise ordered, boxes will be furnished with standard % inch knock-outs for ½ inch conduit
Knock-outs for ½ inch conduit pipes. For knock-outs other than standard, add 10 cents list for each change in size of knock-out. Knock-outs for loom will be furnished when ordered, without additional charge, provided all knock-outs in the same box are of the same size.

Sketch with order, showing size and location of knock-outs will avoid errors and delays.

Made for surface mounting unless otherwise specified. For flush mounted boxes add 50 per cent. to list price.

For weatherproof boxes with overhanging and sloping roof, add 50 per cent. to list price. Prices of galvanized boxes will be quoted on application.

For brass commode catch, add 40 cents list.

For nickel-plated vault handle, add \$1.00 list.

For Yale cylinder lever lock, add 70 cents list.

For master keyed cylinder lever lock, and \$1.00 list.

For master keyes, and 75 cents list for each key.

For spring hinges on doors, add 60 cents list per pair.

Pull or junction boxes with covers take same list prices as surface type boxes.

Unless otherwise ordered, boxes will be made with all four sides overlapping and hinged on right-hand.

Boxes will be made with doors hinged at top when so ordered, without additional charge.

Delivery F. O. B. South Bond. Ind. For warehouse deliveries write nearest house. Delivery F. O. B. South Bend, Ind. For warehouse deliveries write nearest house.

# **CUTTER STEEL BOXES**

# Made to Order Service and Cut-out Boxes

		No. 16 U. S. Gauge Steel		No. 14 U. S. Gauge Steel		No. 12 U. S. Gauge Steel										
		No O	ne Dim 24	ension Inches		eed	No One Dimension to Exceed 54 Inches			For Single Dimensions Ex- ceeding 54 Inches			Ex-			
		No O	ne Surf Squa	ace to l re Inch		360	No On		ace to are Inc		i 1200	For S	urface Squa	s Exce re Incl	_	1200
		1	Mfr's. Li	st Price	Each-		М	fr's. Lis	st Price	e, Each	<u>.</u>	1	Afr's. L	ist Pric	e, Eac	h
Width	Length		-	th, Inch			_	-	th, Inc			_		th, Inc		
Inches	Inches	3 \$0.95	4 \$1.i0	\$1.30	<b>6</b> \$1.50	8 \$1.95	<b>3</b> <b>\$</b> 1.10	<b>\$</b> 1.25	\$1.45				<b>\$</b> 1.50			
4	6 8 10	1.05 1.15 1.25	1.25 1.35 1.45	1.40 1.55 1.65	1.65 1.75 1.90	2.15 2.30 2.45	1.20 1.30 1.40	1.40 1.50 1.65	1.60 1.75 1.90	1.85 2.00 2.15	2.40 2.60 2.80	1.45 1.60 1.70	1.65 1.80 1.95	1.90 2.10 2.25	2.20 2.40 2.60	3.10
6 6 6 6	6 8 10 12 15	1.20 1.30 1.45 1.55 1.75	1.35 1.50 1.65 1.80 2.00	1.55 1.70 1.85 2.05 2.25	1.80 1.95 2.15 2.30 2.55	2.30 2.50 2.70 2.90 3.20	1.35 1.50 1.65 1.80 2.00	1.55 1.70 1.85 2.00 2.25	1.75 1.95 2.10 2.30 2.55	2.05 2.20 2.40 2.60 2.90	2.65 2.85 3.10 3.30 3.65	1.60 1.80 1.95 2.15 2.40	1.85 2.05 2.25 2.40 2.70	2:10 2:35 2:55 2:75 3:05	2.45 2.65 2.90 3.10 3.45	3.65
8 8 8 8 8	8 10 12 14 16 18	1.45 1.65 1.80 1.95 2.10 2.25	1.65 1.85 2.00 2.15 2.35 2.50	1.90 2.10 2.25 2.45 2.60 2.80	2.15 2.35 2.55 2.75 2.90 3.10	2.75 2.95 3.20 3.40 3.60 3.85	1.65 1.85 2.00 2.20 2.35 2.55	1.90 2.10 2.25 2.45 2.65 2.85	2.15 2.35 2.55 2.80 3.00 3.20	2.45 2.65 2.90 3.10 3.35 3.55	3.10 3.40 3.65 3.90 4.15 4.40	2.00 2.20 2.40 2.60 2.80 3.05	2.25 2.50 2.70 2.95 3.15 3.40	2.55 2.80 3.05 3.30 3.55 3.80	2.90 3.20 3.45 3.70 3.95 4.20	4.90
10 10 10 10 10 10 10 10	10 12 14 16 18 20 22 24 30 36	1.80 2.00 2.15 2.65 2.50 3.00 3.20 3.40	2.05 2.20 2.40 2.60 2.80 3.30 3.50 3.75	2.30 2.50 2.70 2.90 3.10 3.65 3.90 4.10	2.55 2.80 3.00 3.20 3.45 4.05 4.25 4.50	3.20 3.45 3.70 3.95 4.20 4.85 5.10 5.40	2.05 2.25 2.45 2.65 2.90 3.40 3.65 3.85 4.55 5.20	2.30 2.55 2.75 3.00 3.20 3.80 4.05 4.25 5.00 5.50	2.60 2.85 3.10 3.30 3.55 4.20 4.45 4.70 5.45 6.20	2.90 3.20 3.45 3.70 3.95 4.60 4.90 5.15 5.95 6.75	3.65 3.95 4.25 4.50 4.80 5.55 5.85 6.15 7.05 7.95	2.45 2.70 2.95 3.20 4.05 4.30 4.60 5.35 6.15	3.30 3.55 3.80 4.50 4.80 5.05 5.90	3.10 3.40 3.65 3.95 4.20 4.95 5.25 5.55 6.45 7.35	3.45 3.75 4.05 4.35 4.65 5.45 5.80 6.10 7.05 8.00	4.70 5.00 5.35 5.70 6.60 6.95 7.30 8.35
12 12 12 12 12 12 12 12 12 12 12	12 14 16 18 20 22 24 30 36 42 48	2.20 2.40 2.60 2.80 3.30 3.55 3.75	2.45 2.65 2.90 3.10 3.65 3.90 4.10	2.70 2.95 3.20 3.40 4.00 4.25 4.50	3.05 3.30 3.50 3.75 4.40 4.65 4.90	3.70 4.00 4.25 4.55 5.55 5.55 5.80	2.50 2.75 2.95 3.20 3.80 4.05 4.30 5.05 5.85 6.60 7.35	2.80 3.05 3.30 3.55 4.20 4.45 4.70 5.55 6.35 7.15 7.95	3.10 3.40 3.65 3.90 4.60 4.90 5.15 6.00 6.85 7.70 8.60	3.45 3.75 4.05 4.30 5.05 5.35 5.65 6.55 7.45 8.35 9.25	4.55 4.90 5.20 6.05 6.35 6.70 7.70 8.65	2.90 3.25 3.55 3.80 4.50 4.80 5.10 6.90 7.80 8.70	3.60 3.90 4.20 4.95 5.25 5.60 6.55 7.50 8.45	3.70 4.00 4.30 4.65 5.45 5.80 6.10 7.10 8.10 9.10 10.15		5.40 5.80 6.15 7.15 7.50 7.90 9.05 10.25 11.40
15 15 15 15 15 15 15 15 16	16 18 20 22 24 30 36 42 48	3.00 3.25 3.80 4.05 4.35	3.30 3.55 4.15 4.45 4.70	3.60 3.90 4.55 4.85 5.10	3.95 4.25 4.95 5.25 5.55	4.75 5.05 5.85 6.15 6.50	3.40 3.70 4.35 4.65 4.95 5.85 6.75 7.65 8.55	3.75 4.05 4.75 5.10 5.40 6.35 7.30 8.25 9.20	4.15 4.45 5.20 5.55 6.85 7.85 8.85 9.85	6.00 6.35 7.40 8.45	5.80 6.70 7.10 7.45 8.60 9.70 10.85	4.05 4.40 5.15 5.50 5.85 6.95 8.00 9.05	4.80 5.65 6.00 6.40 7.50 8.60		9.95 11.20	6.90 7.95 8.35 8.80 10.15 11.45 12.80
18 18 18 18 18 18	18 21 24 30 36 42 48	3.65	4.00	4.35	4.75	5.60 	6.65 7.70 8.75	6.10 7.15 8.25 9.35	6.55	7.10 8.25 9.45 10.60	7.60 8.25 9.50 10.75 12.05	10.30	6.55 7.20	11.75	8.40 9.75 11.15 12.55	9.00 9.70 11.20 12.70 14.20
21 21 21 21 21 21 21	21 24 30 36 42 48					••••	7.45 8.65 9.80	8.00 9.20 10.40	6.65 7.25 8.55 9.80 11.10 12.35	9.15 10.45 11.75	10.40 11.70 13.20	11.55	8.00	8.60 10.10 11.60 13.05	12.35 13.90	10.65 12.30 13.95 15.60
24 24 24 24 24	24 30 36 42 48						8.25 9.55 10.85	8.80 10.15 11.50	8.00 9.40 10.80 12.20 13.60	10.00 11.45 12.90	11.30 12.85 14.40	9.75 11.30 12.85 14.40	8.80 10.40 12.00 13.60 15.20	11.10 12.75	11.80 13.50	13.35 15.15

# PATTERSON ADJUSTABLE FLOOR BOXES

#### National Code Standard



No. 4000 With 10 amp. 250 volt Receptacles and Plugs



No. 4000B Blank Bronze Plate No Receptacle or Plug



No. 4000BN With Double-Outlet Nozzle With 10 amp. 250 volts Receptacle and Pluge

# Adjustable Floor Boxes

Patterson Adjustable Floor Boxes Nos. 4000, 4000B and 4000BN are made for cement and granolithic type floor work.

Universal steel template permits mounting in box, without additional drilling or tapping, the following receptacles: Diamond H, Bryant, Chapman, Arrow E, Pringle, H. & H. Krantz, Hubbell and Mesco; thus giving a range of from 10 to 25 amperes, 250 volts. The plate has permanent outer bronze edge which can be cemented into floor and a removable inside plate, giving easy access to the box at all times without disturbing cemented edge of plate. Regularly tapped for four ½ inch conduit entrances in sides, and one in bottom. When specially ordered, furnished with any arrangement of conduit entrances desired.

With wooden plug furnished with each box, lower sections when set in floor during roughing may be "plugged up" and kept clear of dirt; when cement or granolithic flooring is put down, it will harden around this circular wooden plug and as plug is exact size of bronze face plate, a clean circular hole will be ready for bronze surface plate to snugly fit in when, at time of finishing, wood plug is split out with chisel.

In Patterson Adjustable Floor Boxes, the vertical up-and-down adjustment of 1 inch is ample for any variation of floor level and side or off-level adjustment of 5% inch, makes possible the perfect flushing of plate with surface of floor. The box is universal, giving any combination of conduit entrances. Every possible connection to lighting circuits without additional machine work can be made, as follows:—

- (a) By portable cord through dome-cap with rubber bushing.
- (b) By 5/8 inch brass tubing into dome-cap when bushing is removed.
- (c) By 1/2 inch conduit into flush disc when removable plug is taken out.

List No.	Receptacle and Plug Equipment	Diameter Ins. Bronze Plate	•	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
4000 4003 4000B 4000BN	10 amp. 250 v., 2 wire	$5\frac{3}{16}$ $4\frac{3}{16}$ $5\frac{3}{16}$	5½ x 4½ 5½ x 4½ 5½ x 4½ 5½ x 4½ 5½ x 4½	24 24 24 24 24	230 230 215 225	\$13.50 15.76 12.00 13.50

No receptacles or plugs are included in prices given above.

No. 4000 is for receptacle and plug work.

No. 4000B is with blank bronze plate.

No. 4000BN is with double outlet nozzle.

\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

# PATTERSON NON-ADJUSTABLE FLOOR BOXES National Code Standard



No. 3000 10 Amp., 250 Volts



No. 3000B With Blank Bronze Plate Receptacle and Plug Cannot Be Used



No. 3000BN With Double-outlet Nozzle Receptacle and Plug Cannot Be Used

Conduit and Wiring Accessories

# Non-adjustable Floor Boxes

Patterson floor boxes listed below are designed for wood floor work and for work where it is unnecessary to have the plates of the box adjustable.

All Patterson floor boxes shown on this page are double gasketed throughout, thoroughly waterproof; all parts except floor box itself are heavy cast brass; the box itself is galvanized iron.

No. 3000 Patterson floor boxes are regularly equipped with standard 10 ampere receptacles and plugs;

receptacles and plugs cannot be used in other boxes listed.

Iron floor boxes are regularly drilled and tapped for four ½ inch conduit entrances, two in sides and two in bottom, adapting them to flexible or rigid conduit work without extra drilling. They will be furnished when specially ordered with any arrangement of conduit entrances. Removable plugs are furnished closing all but one outlet.

Cardboard shims are furnished with each box and with these shims bronze plate can be easily brought flush with the floor without taking extreme care in cutting; the setting of a Patterson floor box is thus made quicker and easier than any floor box on the market.

Receptacles may be removed from box for easy wiring by simply loosening two screws. Rubber gasket fits into "under-cut" of bronze plate, so that it does not easily fall out. All Patterson floor boxes may be set with an expansion bit, guaranteeing rapid work.

# FLOOR BOX WITH OUTLET-NOZZLE AND FLUSH DISC

		With Receptacles	and Plugs		
List	Diameter Ins.	Depth Ins.	Std.	Wt. Lbs.	List Price
No.	Bronze Plate	Over All	Pkg.	Std. Pkg.	Each
3000	314	33/8	25	95	<b>\$</b> 6.8 <b>0</b>
. Fu	rnished complete with receptac	tle and plug; 10 am	peres, 250 volts.		
	•	Parts for 300			
3001	Iron box only with 3 iron plu	ıgs			\$1.45
3002	Large cast brass flange for N	o. 3000 box			2.55
3004 3005	Cast brass outlet nozzle	• • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		$\frac{2.15}{1.28}$
3006	Flush brass disc for flange Large rubber gasket				.35
3007	Small rubber gasket			· • • • • • • • • • • • • • • • • • • •	.20
3008	Porcelain receptacle and supp	orting strap		· · · · · · · · · · · · · · · · · · ·	1.55
†3000B †H	FLOOR E $3\frac{11}{16}$ ave no receptacles or plugs as		or Plug · 25 d in 3000B.	NTE 86	<b>\$</b> 5.10
	•	Parts for 3000	B Box		
3009 3010 Otl	Iron box only with 3 iron plu Large cast brass flange for 30 her parts same as No. 3000.	gs 00B box with ½ in			\$1.45 3.75
	FLOOR BO	X WITH DOUBL	E-OUTLET NOZ	ZLE	•
		No Receptacle	or Plug		
t3000B	N 314	33/8	$2\overline{5}$	92	\$8.50
‡H	ave no receptacles or plugs, as	same cannot be use	ed in 3000BN.		•
		Parts for 3000E	BN Box		
	Iron box only with 3 iron plu Large cast brass flange for 30 Cast-brass double-outlet nozz her parts same as No. 3000. relivery F. O. B. Factory, New	ŎOBN box		Caarla	\$1.90 4.25 2.55

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# FIELDING RECEPTACLES AND PLUGS

NATIONAL CODE STANDARD







No. 1500T

# Sectional Mica Pockets

#### 50 Amperes, 250 Volts

Fielding Receptacle Plugs are made of dry mica discs, without shellac or other similar substances threaded on a steel mandrel, placed under heavy pressure and then turned down with a diamond tool. Polarity cannot be reversed, yet by parallel-band construction, a round and quickly entered plug is retained; rated at 50 amperes, but will not heat at 200 amperes; waterproof, fireproof, absolutely indestructible. Aluminum plug handle has bronze locking collar, firmly gripping by a rubber gasket the surface of cable, no knot necessary to tie, but positively secured against any strain coming on the terminal connections. Duplex closing covers operated by a patented device, giving independent control of the covers, make quick plugging possible with no danger of mashing the fingers from entering plug. Simple lifting of the ring inside of plate raises both covers—letting go, gravity drops them flush with the floor.

#### Flush Floor Type

List		Size Plate	Depth	*List Price
No.		Inches	Inches	Each
1505	Stage pocket and plug complete	9x9	81/4	<b>\$</b> 54.00
1505G2	Two gang pocket with two plugs	13x9	81/4	108.00
1505GR2	Two gang pocket only, no plugs	13 <b>x</b> 9	81/4	<b>54.00</b>
1505P	Plug only with handle and locking collar		71/2	27.00
1505R	Pocket only	9 <b>x</b> 9	81/4	27.00

Two gang only 4 inches wider than one gang.

# Side Wall Receptacles and Plugs

# 50 Amperes, 250 Volts

Fielding Receptacles Nos. 1500T and 1500B are designed for work where the receptacle is to be attached to side wall or iron column, switchboard panel, etc. They have all the points of superiority noted above in detail, and have been adopted as a standard by many railroads for storage battery charging panels. They are also used on garage switchboards of up-to-date design. Furnished with brass plate in place of heavy iron plate if desired. Size of brass plate can be as low as 5½ inches square. Depth from surface of plate to back of porcelain, 4¾ inches.

List		Conduit	D	imensions		*List Price
No.		Enters From	Length	Width	Depth	Each
1500 <b>T</b>	Receptacle complete	. Тор	63/4	63/4	51/2	<b>\$4</b> 5.00
1500B	Receptacle complete	. Bottom	634	63/4	$5\frac{1}{2}$	45.00
1500TR	Receptacle only		63/4	$6\frac{3}{4}$	51/2	22.50
1500BR	Receptacle only		63/4	63/4	51/2	22.50
1500P	Plug only, aluminum handle		91/2	$2\frac{1}{2}$	• • •	22.50

Prices for gang receptacles in proportion.

\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

# WATERTIGHT FLOOR BOXES



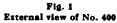




Fig. 2 External view of No. 400



Fig. 11 External view of No. 401

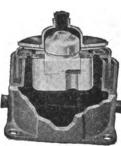


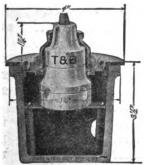
Fig. 12 Sectional view of No. 401



Fig. 20 No. 420 Outlet with 465 nozzle



Fig. 34 No. 442



No. 1100

# Fullman Adjustable Watertight Floor Boxes

List No.	†Li Description	st Price Each
400	Complete outlet consisting of box body, sealing	2402
	cement, adjusting ring, rubber gasket and brass cover plate with ½ inch flush brass plug for No 465 Nozzle or ½ inch pipe extension	<b>\$</b> 6.80
401	Complete outlet as above, with 2 in, flush brass plug	₩0.80
	for No. 466 Nozzle	7.66
420	Complete outlet as shown, with ½ in. flush brass plug for No. 465 Nozzle or ½ in. pipe extension	7.66
421	Complete outlet as above, with 2 in. flush brass plug	• .00
****	for No. 466 Nozzle	8.50
*442	Two-section gang outlet complete with two individual cover plates with 1/2 in flush brass plug	8.50
*443	Three-section gang outlet complete with three in-	8.50
	dividual cover plates with 1/2 in, flush brass plug.	8.50
*444	Four-section gang outlet complete with four individ-	
*445	ual cover plates with ½ in flush brass plug Five-section gang outlet complete with five individ-	8.50
440	ual cover plates with ½ in. flush brass plug	8.50
*446	Six-section gang outlet complete with six individual cover plates with ½ in. flush brass plug	8.50
	ACCESSORIES	
465	Brass nozzles for Nos. 400, 420, 442, 443, 444, 445	
	and 446 floor outlet	<b>\$</b> 1.90
466	Brass nozzle for Nos. 401, 421, 442, 443, 444, 445	1 00
413	and 446 floor outletBrass flange ring including rubber gasket for Nos.	1.90
	400 and 401 floor outlet	1.28
440	Brass flange ring including rubber gasket for Nos.	1 70
	420 and 421 floor outlet	1.70
	SEPARATE PARTS	
402	Standard box for 400 and 401 outlet	<b>\$3.86</b>
422	Standard box for Nos. 420 and 421 outlet	4.42
448	Standard 2 gang box for Nos. 442, 443, 444, 445 and 446 outlet	7.48
	Specify size of flush brass plug desired in cover plate.	10
]	Price for 2 inch flush plug, add 86 cents to list price.	

#### T & B No. 1100—ADJUSTABLE

Lis <b>t</b> No.		†List Price Each
1101	Back only	\$2.20
1102	Brass cover, flush plug and gasket	3.50
1104		
1105	Receptacle strap and screw	1.80
1100		
1106		
	†Delivery F. O. B. Factory, Pittsburgh, Pa. †Delive	

Factory, New York, N. Y. For warehouse deliveries write nearest house. Digitized by GOOL Conduit and Wiring Accessories List

List Price

# Western Electric

# WATERTIGHT FLOOR BOXES



Actual Size

# Watertight Floor Boxes

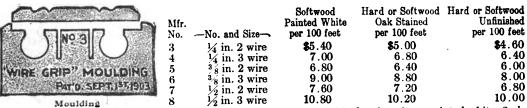
# KRANTZ "ACME" FLOOR BOX

This box is adjustable, and watertight cover can be tilted half an inch in any direction.

No.		Each
6061	Galvanized cast iron box body	\$2.80
6062	Rubber gasket	.28
6063	Adjustable ring with inside fastening ring No. 6064	1.40
6065	Adjustable cover ring with brass floor flange No. 6005	2.90
6007	Brass nozzle cover with rubber gasket and receptacle bridge support	3.12
6012	Brass cover plate	1.80
6011	Brass cover plate with ½ in. plug	2.12
6013	Brass cover plate with ¾ in. plug	2.32
6014	Brass cover plate with 1 in. plug	2.52
6017	Rubber gasket for cover plate	.14
6561	Complete Acme box consisting of box body No. 6061, gasket No. 6062, adjustable ring No. 6065, gasket No. 6017, cover No. 6012	9.64
6562	Complete Acme box consisting of box body No. 6061, gasket No. 6062, adjustable ring No. 6063, cover ring No. 6055, nozzle cover No. 6007, center No. 7012	11.20
	ACCESSORIES	٠
7021	Steel bridge for receptacle	<b>\$</b> 0.3 <b>4</b>
7051	G. E. receptacle and plug	.84
7054	Hubbell receptacle and plug	1.24
7001	Brass nozzle for Hubbell receptacle	2.00
7002	Brass nozzle with insulating bushing	2.30
7011	Brass center flat	.70
7012	Brass center with ½ in. plug	1.20
7013	Brass center with ¾ in. plug	1.40
7014	Brass center with 1 in. plug	1.60

Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house. Conduit and Wiring Accessories 58-2

# WIRE GRIP MOULDING AND FIBER CLEATS



Note: When ordering please state whether you want, 1st: unfinished, oak stain or painted white; 2nd: size of groove; 3rd: number of grooves; 4th: hardwood or softwood; 5th: inserted cap or wide cap style.



Style A



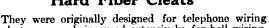








Hard Fiber Cleats





only, but are now being used extensively for bell wiring, annunciator systems, time clocks, telegraph outfits, etc. Type E is particularly adapted for fastening electric light wires to switchboards, motor frames, etc.

In ordering be sure to mention color preferred: red, gray or black; otherwise red will be furnished.

_			•	, 6 0	*List Price		L	ist Price
Style		Length	Width	Groove	per 1000	Style		per 1000
A	Single groove cleat	34 in.	<del>}}</del> in.	$\frac{1}{4}$ x $\frac{1}{8}$ in.	<b>\$</b> 18.00			
В	Double groove cleat	3⁄4 in.	<del>}}</del> in.	$\frac{1}{8}$ x $\frac{1}{8}$ in.	18.00			
$\mathbf{C}$	Corner cleat	₩ in.	🚻 in.	$\frac{1}{4}$ x $\frac{1}{8}$ in.	16.00	1	Single groove	<b>\$</b> 8.00
Ď	Three-wire cleat	1½ in.	- 📆 in.	$\frac{1}{8}$ x $\frac{1}{8}$ in.	<b>36.00</b>	${f 2}$	Double groove	8.00
$ar{\mathbf{E}}$	Large double cleat	15% in.	16 in.	$\frac{1}{4}$ x $\frac{1}{4}$ in.	60.00	<b>2A</b>	Double groove	8.00



Blake Compressed Cleats.....



# Blake Insulated Staples and Cleats

			Pri	ces	
List No.		Single Pkg.	Lots 1000 to 5000 per 1000	Lots 5000 to 10000 per 1000	Lots 10000 and Over per 1000
110.	The state of the s	\$0.50	\$2.90	<b>\$2.80</b>	<b>\$</b> 2.60
3	For hardwood, for single and twisted pair wire For general use, for single and twisted pair wire	.50	2.90	2.80	2.60
5	For hardwood, for twisted 3 wire and extra heavy pair wire	.60	3.20	3.10	2.90
6	For general use, for twisted 3 wire and extra heavy pair wire	.60	3.20	3.10	2.90
	p		List Pri	ces	
	Communication of Closes	Single Pkg. of 100 Cleats per Pkg. \$0.70	1000 and less than 5000 per 1000 \$5.50	5000 and less than 10000 per 1000 \$5.30	

# Leather Nail Heads

These leather nail heads or washers are used to prevent cracking the porcelain in knob or cleat wiring. -Price per Thousandner Ros

	f 1000 Less than 10000	10000-25000 <b>\$</b> 0.70	25000-50000 <b>\$0</b> . 40	50000 and Over \$0.36
T !_A	1 lb. \$1 00 ((Milonite))	Perfection Insu	• · · • · · ·	List Price
List No.				per 1000 \$2.40
15 18	Nails (plain top)		. <b></b>	0.00
00	Noile (plain top)			2 00
22	Nails (plain top)	olor desired except white,	for which add 30 cents t	o list.

Note: The above furnished in a Digitized Conduit and Wiring Accessories 59 & 60 53

# Western Electric

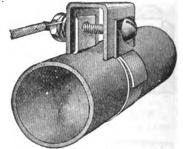
# **GROUND CLAMPS**



For Standard Iron Pipe Double Screw



For Flexible Steel Conduit



No. V-2

# Ground Clamps FOR STANDARD IRON PIPE

	W. E. List	W. E. List	W. E. List	W. E. List		W. E. List	W. E. List	W. E. List	W. E. List
	Each	Per 100	Each	Per 100		Each	Per 100	Each	Per 100 ·
	Single	Single	Double	Double		Single	Single	Double	Double
	Screw	Screw	Screw	Screw		Screw	Screw	Screw	Screw
Size 3 8	<b>\$</b> 0.48	<b>\$28.80</b>	<b>\$</b> 0.80	\$48.00	Size 11/2	<b>\$</b> 0.96	<b>\$</b> 57.60	\$1.36	<b>\$</b> 81.60
Size 12	.48	28.80	.80	48.00	Size 2	1.20	72.50	1.69	96.00
Size 34	. 56	33.60	.88	52.80	Size 212	1.52	91.20	1.68	100.80
Size 1	.64	38.40	1.04	62.40	Size 3	1.84	110.40	1.92	115.20
Size 11/4	.72	43.20	1.16	69.60					

# FOR FLEXIBLE STEEL CONDUIT AND CONDUCTOR

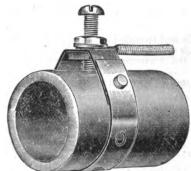
	101112	weible .	CO LILL CO	NDOIL	AND CONDUCTOR		
	•	W. E. List	W. E. List			W. E. List	W. E. List
		Each	Per 100			Each	Per 100
		Single	Single			Single	Single
		Screw	Screw		1	Screw	Screw
Size A	For No. 14 and 12 BX2			Size C	½ in. flexible conduit.	<b>\$</b> 0.64	<b>\$3</b> 8. <b>40</b>
	conductors	\$0.52	<b>\$</b> 31.20	Size D	$\frac{3\sqrt{4}}{4}$ in. flexible conduit,		
	For No. 14 BX3 and 3/8			İ	No. 4, BX2	.76	45.60
	flexible conduit	. 52	31.20	Size E	1 in. flexible conduit	.92	<b>55.20</b>
Size B	For No. 10 BX2 and 3		i				
	conductors	. 52	31.20				
	For No. 12 BX3, No.						
	12 and 14 BXL	. 52	31.20				
400	. 1						

100 clamps of assorted sizes constitute a standard package. N. E. C. standard. The average assortment of 500 clamps boxed for shipment weighs approximately 100 lbs.

List	Vogel Ground Clamp	W. E. List	W. E. List
No.		Each	Per 100
	Vogel ground clamp		\$13.00



No. 0



No. A-1



No. 3

# Blackburn Adjustable Ground Clamps

List		Std.		W. E. List	W. E. List
No.		Pkg.	1000	Each	Per 100
0	Fits 3 g and 1 2 in. ground rods	100	30	<b>\$</b> 0.14	<b>\$</b> 12.10
A-1	Fits $^3$ s, $^1$ 2, $^3$ 4, 1 and 1 1/4 in. pipe	100	50	.14	12.10
2	Fits $1\frac{1}{2}$ , $2$ , $2\frac{1}{2}$ and $3$ in. pipe	100	60	. 16	13.75

# Blackburn Nos. 3 and 4 Ground Clamps

List		Std.	Wt. per		W. E. List-	
No.		Pkg.	100	Each	Per 100	Per 1000
3	Fits 38, 12, 34, 1 and 114 in. pipe	50	12	<b>\$</b> 0.20	\$18.00	\$160.00
4	Fits $1\frac{1}{2}$ , $2$ , $2\frac{1}{2}$ and $3$ in. pipe	50	16	.24	22.00	190.00
				igitized by	$\mathbf{C}$	

Conduit and Wiring Accessories

**62-1 &** 62-2

# RECEPTACLES AND PLUGS











No. 80

Receptacles and Plugs for Interior Use

No. 68

10 AMPERES, 250 VOLTS List W.E. List Each No. Fits all standard switch boxes. With plug.

Fits all standard 4 inch diameter outlet boxes. With plug.

Weatherproof receptacle in 3 inch iron box. With plug.

Weatherproof receptacle in 4 inch iron box. With plug. 121 \$2.40 12 2.32 123 4.94 124 5.78 90° angle type receptacle complete with plug
Plug only for all of the above fittings. 125 3 72 120 15 AMPERES, 250 VOLTS 65 \$2.24 gang receptacle for 4 inch round box cover to have 234 inch diameter opening. Complete with plugs 66 3.96 68 2.70 30 AMPERES, 250 VOLTS Polarity type. Fits all std. switch boxes. With plug.

Plug only for No. 80 receptacle.

3 wire, polarity type. Fits std. switch box. With plug.

3 wire plug only.

3 wire, heavy non-reversible type. In large iron box with heavy brass overhang cover. Complete with plug.

Plug only for No. 152 80 56  $\begin{array}{c} 1.68 \\ 8.48 \end{array}$ 81 57 3.54 152 26.42 150 4.94 60 AMPERES, 250 VOLTS 14 140 75 153



151





No.456



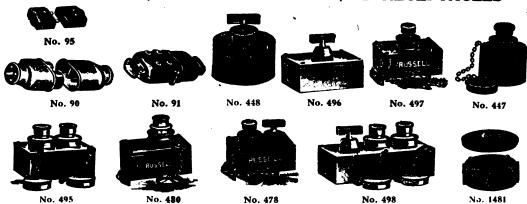
No. 82

# Floor Outlet Type

Nos. 61, 170 to 175 for Use With 1900 Fittings

List No.	I	W. E. List Price
61 170 171 172 173 174 <b>175</b>	One outlet, double receptacle in brass box.  Two outlets, single receptacle in brass box.  Two outlets, double receptacle in brass box.  Two outlets, double receptacle in brass box.  With plugs.  Two outlets, double receptacle in brass box.  With plugs.  One outlet, three receptacles in brass box.  With plugs.  One outlet, four receptacles in brass box.  With plugs.  With plugs.  Single receptacle in brass box with ears on side for fastening on rail or bank screen. With plug.  Delivery F. O. B. New York City.  For warehouse deliveries write nearest house.  Digitized by	7.42 5.38 7.86 12.58 14.86

# CONNECTORS, MARINE SWITCHES AND RECEPTACLES



	Conne	cto	rs
15	AMPERES,	250	<b>VOLTS</b>

List Price Each

\$1.72

1.48

This is a heavy molded composition connector with heavy brass, self aligning contacts. It is very compact, measuring 3% x 1¾ x ½, and has been designed to withstand the roughest of usage. It is suitable for stage connections, all kinds of industrial works, and 95 particularly adaptable for use in garages where Underwriters forbid the use of ordinary receptacle and plug.....

#### **60 AMPERES, 125 VOLTS**

90	Heavy composition body, with self aligning, non-reversible contacts. Aluminum casing.	
	Suitable for battery charging	\$13.20
91	Similar to No. 90 for flat cable	11.56
149	Fits plugs used with fittings 14, 142, 143 non-reversible	16.52
96	Steel jacketed non-reversible connector with hard maple handles. 2 wire	29.72
97	3 wire connector, similar to 96	33.04

#### WATERTIGHT CONNECTORS

93	Heavy brass casing with watertight glands	Fits plug No. 452.	10 amperes, 125 volts	\$8.26
94	Three wire, similar to No. 93	• 0	•	11 56

# Marine Switches and Receptacles

	. SWITCHES	
448	Special composition base, 10 ampere, single; pole, snap switch in 23/4 inch diameter brass box.	<b>\$</b> 6.36
520	Double pole, 10 ampere snap switch in 3¾ inch iron box	5.30
496	Composition base, 10 ampere single pole snap switch in heavy brass box, 4 x 23/4	7.08
627	Two gang, single pole composition base switch. 10 amperes	9.90
156	Double pole, 10 ampere snap switch in 4 inch square iron box	3.12
458	5 ampere, heavy composition non-reversible receptacle and plug in watertight brass box.	0.12
100	1 % inch diameter. With plug	4.48
459	Same as No. 458 receptacle in small rectangular box. With plug	4.48
447	10 ampere, strong composition non-reversible receptacle and plug, in watertight brass box.	
	2% inch diameter. With plug	8.36
484	Three wire porcelain non-reversible receptacle in watertight brass box, 334 inch diameter.	•
-0-	Heavy composition plug	9.90
479	10 ampere, 2 wire composition receptacle in brass box, 4 x 2¾ inches. Same receptacle	• • • •
	and plug as No. 447	7.08
495	Two gang, 10 ampere receptacle and plug in brass box, 4 x 23/4 inches. Complete with plugs	9.90
1485	25 ampere, slate receptacle in watertight brass box. Complete with plug	19.82
480	50 amperes. Similar to No. 1485. With plug.	22.92
100	ov amperes. Difficult to 110. 1200.	22.02
	10 AMPERE SWITCH AND RECEPTACLE	
478	In watertight brass box, 4 x 2¾ inches. With plug	\$8.48
498	Two gang receptacle with switch in watertight brass box, 6 x 2\% inches. With plugs	12.74
1490	Two-gang switch with one receptacle in No. 498 box. Complete with plug	12.74
	WATERTIGHT JUNCTION BOXES	
1481	3 inch round iron ignormed with cover and casket	<b>\$0.08</b>

1433

3 inch round, iron, japanned with cover and gasket.
4 inch round, iron, japanned with cover and gasket.
3 inch round, brass with cover and gasket.
4 inch round, brass with cover and gasket.
4 inch round, iron, with screw cover and gasket.

4 x 4 x 1½ inch, iron, with cover and gasket.

We furnish all sizes and types of junction boxes. Prices given on application.
Delivery F. O. B. New York City. For warehouse deliveries write nearest house. 481 1.80 2.64 432 2.30

Digitized by GOOGLE

Conduit and Wiring Accessories

# RECEPTACLES AND PLUGS







No. 72



No. 85



No. 142



Weatherproof Heavy Duty Working Receptacles and Plugs



List	60 AMPERES, 125 VOLTS List	
No.	Price Each	
143	Heavy non-reversible porcelain receptacle in iron box and cover for exposed work. With plug \$16.52	
144	Two gang, similar to No. 143.	
140	Plug only for Nos. 143 and 144	:
71	Heavy porcelain non-reversible receptacle in heavy iron box. Heavy composition plug with	
72	hardwood handle 19.82 Battery charging receptacle. Similar to No. 71 with non-short circuiting sleeve on plug 21.46	
70		
70	Angle type similar to No. 71	
84	30 ampere, non-reversible slate receptacle in iron box with cover for exposed work. With plug \$23.12	,
85	60 ampere, non-reversible slate receptacle in iron box with iron cover. With plug 29.72	
00	3 WIRE. 75 AMPERES, 250 VOLTS	
485	Heavy slate receptacle in iron box with iron cover. For exposed work. Composition plug	
	with hardwood handle \$28.08 Same as No. 485, with two extra 10 ampere watertight receptacles in same box, complete with	
232	Same as No. 485, with two extra 10 ampere watertight receptacles in same box, complete with	
	plugs	
	3 WIRE. 100 AMPERES, 250 VOLTS	
233	Heavy slate receptacle in iron box with cover for exposed work. With plug \$41.52	
235	Storage battery car type. With box for mounting under car. With plug having non-short circuiting sleeve	į
	•	
	F41 <b>f</b> 5 . 1	
	Floor Receptacles	
List	Floor Receptacles 60 AMPERES, 125 VOLTS List	
List No.	60 AMPERES, 125 VOLTS List Price Each	
	60 AMPERES, 125 VOLTS List	
No.	60 AMPERES, 125 VOLTS  List Price Each Porcelain receptacles in iron box with brass cover cap and cone. Complete with plug \$24.78  3 WIRE. 30 AND 60 AMPERES, 250 VOLTS  30 ampere, slate receptacle in iron box with brass cover, cap and cone. Box 4 inches	,
No. 142 154	60 AMPERES, 125 VOLTS  List Price Each Porcelain receptacles in iron box with brass cover cap and cone. Complete with plug \$24.78  3 WIRE. 30 AND 60 AMPERES, 250 VOLTS  30 ampere, slate receptacle in iron box with brass cover, cap and cone. Box 4 inches	,
No. 142	Forcelain receptacles in iron box with brass cover cap and cone. Complete with plug \$24.78  3 WIRE. 30 AND 60 AMPERES, 250 VOLTS  30 ampere, slate receptacle in iron box with brass cover, cap and cone. Box 4 inches diameter. With plug \$26.42	;
No. 142 154	Forcelain receptacles in iron box with brass cover cap and cone. Complete with plug \$24.78  3 WIRE. 30 AND 60 AMPERES, 250 VOLTS  30 ampere, slate receptacle in iron box with brass cover, cap and cone. Box 4 inches diameter. With plug \$26.42	;
No. 142 154 155	Forcelain receptacles in iron box with brass cover cap and cone. Complete with plug. \$24.78  3 WIRE. 30 AND 60 AMPERES, 250 VOLTS  30 ampere, slate receptacle in iron box with brass cover, cap and cone. Box 4 inches diameter. With plug. \$26.42  60 ampere, slate receptacle in 5 inch diameter iron box with brass cover, cap and cone. With plug. \$26.42  100 AMPERES. 250 VOLTS	;
No. 142 154	Forcelain receptacles in iron box with brass cover cap and cone. Complete with plug. \$24.78  3 WIRE. 30 AND 60 AMPERES, 250 VOLTS  30 ampere, slate receptacle in iron box with brass cover, cap and cone. Box 4 inches diameter. With plug. \$26.42  60 ampere, slate receptacle in 5 inch diameter iron box with brass cover, cap and cone. With plug. \$41.68  100 AMPERES, 250 VOLTS  Slate receptacle in iron box with brass cover, cap and cone. With plug. \$41.52	;
No. 142 154 155 239	Frice Each Porcelain receptacles in iron box with brass cover cap and cone. Complete with plug. \$24.78  3 WIRE. 30 AND 60 AMPERES, 250 VOLTS  30 ampere, slate receptacle in iron box with brass cover, cap and cone. Box 4 inches diameter. With plug. \$26.42  60 ampere, slate receptacle in 5 inch diameter iron box with brass cover, cap and cone. With plug. \$46.88  100 AMPERES, 250 VOLTS  Slate receptacle in iron box with brass cover, cap and cone. With plug. \$41.52	;
No. 142 154 155 239	Forcelain receptacles in iron box with brass cover cap and cone. Complete with plug. \$24.78  3 WIRE. 30 AND 60 AMPERES, 250 VOLTS  30 ampere, slate receptacle in iron box with brass cover, cap and cone. Box 4 inches diameter. With plug. \$26.42  60 ampere, slate receptacle in 5 inch diameter iron box with brass cover, cap and cone. With plug. \$46.42  100 AMPERES, 250 VOLTS  Slate receptacle in iron box with brass cover, cap and cone. With plug. \$41.52  10 AMPERES, 250 VOLTS  Heavy composition receptacles in iron box with brass cover, cap and cone, with non-reversible	;
No. 142 154 155 239	Frice Each Porcelain receptacles in iron box with brass cover cap and cone. Complete with plug. \$24.78  3 WIRE. 30 AND 60 AMPERES, 250 VOLTS  30 ampere, slate receptacle in iron box with brass cover, cap and cone. Box 4 inches diameter. With plug. \$26.42  60 ampere, slate receptacle in 5 inch diameter iron box with brass cover, cap and cone. With plug. \$26.42  100 AMPERES, 250 VOLTS  Slate receptacle in iron box with brass cover, cap and cone. With plug. \$41.52  10 AMPERES, 250 VOLTS  Heavy composition receptacles in iron box with brass cover, cap and cone, with non-reversible Heavy composition receptacles in iron box with brass cover, cap and cone, with non-reversible Heavy composition receptacles in iron box with brass cover, cap and cone, with non-reversible Heavy composition receptacles in iron box with brass cover, cap and cone, with non-reversible	
No. 142 154 155 239 2	Frice Each Porcelain receptacles in iron box with brass cover cap and cone. Complete with plug. \$24.78  3 WIRE. 30 AND 60 AMPERES, 250 VOLTS  30 ampere, slate receptacle in iron box with brass cover, cap and cone. Box 4 inches diameter. With plug. \$26.42  60 ampere, slate receptacle in 5 inch diameter iron box with brass cover, cap and cone. With plug. \$41.68  100 AMPERES, 250 VOLTS  Slate receptacle in iron box with brass cover, cap and cone. With plug. \$41.52  10 AMPERES, 250 VOLTS  Heavy composition receptacles in iron box with brass cover, cap and cone, with non-reversible Heavy composition receptacles in iron box with brass cover, cap and cone, with non-reversible composition plug. \$9.08	
No. 142 154 155 239 2 2	Frice Each Porcelain receptacles in iron box with brass cover cap and cone. Complete with plug. \$24.78  3 WIRE. 30 AND 60 AMPERES, 250 VOLTS  30 ampere, slate receptacle in iron box with brass cover, cap and cone. Box 4 inches diameter. With plug. \$26.42  60 ampere, slate receptacle in 5 inch diameter iron box with brass cover, cap and cone. With plug. \$46.82  100 AMPERES, 250 VOLTS  Slate receptacle in iron box with brass cover, cap and cone. With plug. \$41.52  10 AMPERES, 250 VOLTS  Heav y composition receptacles in iron box with brass cover, cap and cone, with non-reversible Heavy composition receptacles in iron box with brass cover, cap and cone, with non-reversible composition plug. \$9.08  Same as No. 2, in 4 inch square box with square cover. With plug. \$9.08	
No. 142 154 155 239 2	Frice Each Porcelain receptacles in iron box with brass cover cap and cone. Complete with plug. \$24.78  3 WIRE. 30 AND 60 AMPERES, 250 VOLTS  30 ampere, slate receptacle in iron box with brass cover, cap and cone. Box 4 inches diameter. With plug. \$26.42  60 ampere, slate receptacle in 5 inch diameter iron box with brass cover, cap and cone. With plug. \$46.82  100 AMPERES, 250 VOLTS  Slate receptacle in iron box with brass cover, cap and cone. With plug. \$41.52  10 AMPERES, 250 VOLTS  Heavy composition receptacles in iron box with brass cover, cap and cone, with non-reversible Heavy composition receptacles in iron box with brass cover, cap and cone, with non-reversible composition plug. \$9.08  Same as No. 2, in 4 inch square box with square cover. With plug. \$9.08  3 wire receptacle, same as No. 2. With plug. \$11.56  3 wire receptacle, same as No. 22. With plug. \$11.56	
No. 142 154 155 239 2 2 2 22 23 24	Frice Each Porcelain receptacles in iron box with brass cover cap and cone. Complete with plug. \$24.78  3 WIRE. 30 AND 60 AMPERES, 250 VOLTS  30 ampere, slate receptacle in iron box with brass cover, cap and cone. Box 4 inches diameter. With plug. \$26.42  60 ampere, slate receptacle in 5 inch diameter iron box with brass cover, cap and cone. With plug. \$41.68  100 AMPERES, 250 VOLTS  Slate receptacle in iron box with brass cover, cap and cone. With plug. \$41.52  10 AMPERES, 250 VOLTS  Heavy composition receptacles in iron box with brass cover, cap and cone, with non-reversible Heavy composition receptacles in iron box with brass cover, cap and cone, with non-reversible composition plug. \$9.08  Same as No. 2, in 4 inch square box with square cover. With plug. 9.08  3 wire receptacle, same as No. 2. With plug. 11.56  3 wire receptacle, same as No. 22. With plug. 11.56  50 AMPERES, 125 VOLTS	
No. 142 154 155 239 2 2 2 22 23	Frice Each Porcelain receptacles in iron box with brass cover cap and cone. Complete with plug. \$24.78  3 WIRE. 30 AND 60 AMPERES, 250 VOLTS  30 ampere, slate receptacle in iron box with brass cover, cap and cone. Box 4 inches diameter. With plug. \$26.42  60 ampere, slate receptacle in 5 inch diameter iron box with brass cover, cap and cone. With plug. \$41.52  100 AMPERES, 250 VOLTS  Slate receptacle in iron box with brass cover, cap and cone. With plug. \$41.52  10 AMPERES, 250 VOLTS  Heavy composition receptacles in iron box with brass cover, cap and cone, with non-reversible Heavy composition receptacles in iron box with brass cover, cap and cone, with non-reversible composition plug. \$9.08  Same as No. 2, in 4 inch square box with square cover. With plug. \$9.08  3 wire receptacle, same as No. 2. With plug. \$11.56  3 wire receptacle, same as No. 22. With plug. \$11.56  50 AMPERES, 125 VOLTS  Stage pocket. Heavy porcelain receptacle in iron box and cover. With plug. \$16.52	
No. 142 154 155 239 2 2 2 23 24 13 132	Frice Each Porcelain receptacles in iron box with brass cover cap and cone. Complete with plug. \$24.78  3 WIRE. 30 AND 60 AMPERES, 250 VOLTS  30 ampere, slate receptacle in iron box with brass cover, cap and cone. Box 4 inches diameter. With plug. \$26.42  60 ampere, slate receptacle in 5 inch diameter iron box with brass cover, cap and cone. With plug. \$41.68  100 AMPERES, 250 VOLTS  Slate receptacle in iron box with brass cover, cap and cone. With plug. \$41.52  10 AMPERES, 250 VOLTS  Heavy composition receptacles in iron box with brass cover, cap and cone, with non-reversible Heavy composition receptacles in iron box with brass cover, cap and cone, with non-reversible composition plug. \$9.08  Same as No. 2, in 4 inch square box with square cover. With plug. 9.08  3 wire receptacle, same as No. 2. With plug. 11.56  3 wire receptacle, same as No. 22. With plug. 11.56  50 AMPERES, 125 VOLTS	

# LONG RADIUS CONDUIT FITTINGS

# Floor Outlets

An efficient substitute for the old style floor box or receptacle, with its necessarily large and objectionable floor plate, which has limited the distribution of floor outlets to the most necessary locations only.

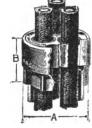
With this fitting, future requirements may be anticipated by systematically studding the floor with these outlets, all radiating from one or more pull boxes, located in the side walls, from which any changes or additions can subsequently be made by the pulling of wires.

The complete outlet consists of a long radius conduit fitting, as listed below, and an adjustable top, with waterproof cap, as listed below, which can be raised or lowered to meet the final surfacing of floor.









No. 1905

1915 Cable Support

# Floor Outlets

Receptacles Nos. 61, 170-175 have been especially designed for use with these fittings with adjustable top and brass extension No. 1925.

Made of galvanized iron, tapped for conduit. Brass fittings on special order.

·
½ inch elbow
34 inch elbow
1 inch elbow
1½ inch elbow
1½ inch elbow
13 inch tee
3∕4 inch tee
1 inch tee
1!4 inch tee
$1\frac{1}{2}$ inch tee

# Adjustable Tops

Cast brass, bottom threaded to fit long radius fittings listed above, top threaded to take extension or stand pipes and fitted with gasket and blind cap.

List No.	•		List Price
1915		½ inch adjustable tops	
1916 1917		3/4 inch adjustable tops	
1917		1 1/4 inch adjustable tops.	
1919		1½ inch adjustable tops	2.82
1925		Polished brass extension, 6 inches long; other lengths on special order. 1/2 inch pipe size	1.26

# Cable Supports

These cable supports are used throughout the country in large hotel and office buildings and lofts. They consist of a galvanized iron collar screwed on the end of a riser in place of a bushing. Cable is then pulled and galvanized iron inserts are dropped around cables and rest on seating in collar. Split fiber bushings, which are threaded on the inside to grip cable and tapered on the outside to fit the taper of the iron inserts, are then placed around cables, which are now allowed to pull the grips into place by their own weight.

These cable supports are made for 1 inch, 1½ inch, 1½ inch, 2 inch, 2½ inch, 3 inch, 3½ inch and 4 inch conduit and can be furnished to take 1, 2, 3 or 4 cables in a conduit.

Write us for further information and quotation.

Delivery F. O. B. New York City. For warehouse deliveries write nearest house.

#### CONDULET BODIES WITH OBROUND OPENINGS

TYPE A TYPE BE

Types A and B Condulet Bodies Take Obround Covers and Obround Conduletto Fittings

Type BE Condulet Bodies Take Obround Covers Only

	TYPE A CO	NDULE	T BOD	IES—Bla	ck Enam	el Finish	1
	Size in inches	1/2	3/4	1	11/4	11/2	2
D COMPAGE &	Catalogue Number. Standard Package. Ship. Wt. Std. Pkg List Price, each	A1 200 130 lbs. \$ .24	A 2 100 95 lbs. \$ .31	A3 50 80 lbs. \$ .43	A4 20 60 lbs. \$ .62	A5 10 40 lbs. \$ .80	-A6 5 30 lbs. \$1.66
	Size in inches	21/2	3	31/2	4	5	6
y.	Catalogue Number. Standard Package Ship. Wt. Std. Pkg List Price, each	5	A8 5 55 lbs. \$5.45	A9 5 65 lbs. \$10.40	A 10 5 70 lbs. \$11.70	A 012 5 90 lbs. \$20.00	A 014 5 100 lbs. \$30.00
	туре в со	NDULE	T BOD	ES-Bla	ck Enam	el Finish	1
	Size in inches	1/2	3/4	1		11/4	11/2
	Catalogue Number. Standard Package Ship. Wt. Std. Pkg List Price, each	B1 200 140 lbs. \$ .29	P 2 1 0 100 lb \$ .36	B3 50 80 lb \$ .50		lbs. 4	35 0 0 lbs. 1.04
	Size in inches	2	21/2	3	(3)	31/2	4
WILL STATE OF THE	Catalogue Number. Standard Package. Ship. Wt. Std. Pkg List Price, each	B6 5 30 lbs. \$2.14	B7 5 50 lbs \$5.35	B8 5 60 lb \$5.88		lbs. 5	3 10 0 lbs. 12.70
(L)	TYPE BE CO	ONDULE	ET BOI	DIES-B1	ack Enai	nel Finis	h
	Size in inches	1/2	3/4	1	11/4	11/2	2
	Catalogue Number. Standard Package Ship. Wt. Std. Pkg List Price, each	BE1 200 390 lbs. \$ .40	BE2 100 300 lbs. \$ .50	BE3 50 190 lbs. \$ .85	BE4 20 120 lbs \$1.30	BE5 10 100 lbs \$2.00	BE6 5 . 80lbs. \$3.50
	Size in inches	21/2	3	31/2	4	5	6
	Catalogue Number. Standard Package Ship. Wt. Std. Pkg List Price, each		BE8 5 160 lbs. \$10.15	BE9 5 225 lbs. \$21.30	BE10 5 225 lbs. \$25.30	BE012 5 430 lbs \$70.00	BE014 5 430 lbs. \$80.00

#### Important Information Concerning Condulet Bodies Listed on This Page

Obround covers and Obround Conduletto fittings of same size are interchangeable on above Condulet bodies of corresponding size, except that type BE Condulet bodies take Obround covers only.

Proper fastening screws are furnished with Obround covers and Obround Conduletto fittings, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, see page 182. For cast brass and cast bronze Condulet bodies, plain and with special finishes, see page 182. For aluminum Condulet bodies, plain and with black enamel finish, see page 182.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Obround covers are listed on pages 30, 31 and 32. Obround Conduletto fittings are listed on pages 184 and 185. Obround gaskets are listed on page 176. Condulet reducers are listed on page 171. Condulet bodies with Obround openings are listed on pages 21 to 29a, inclusive, and on page 161.

# CONDULET BODIES WITH OBROUND OPENINGS—Continued TYPE C TYPE CO TYPE D

Take Obround Covers and Obround Conduletto Fittings

	TYPE C C	ONDULE	T BODIE	S-Black	Enamel Fir	nish
	Size in inches	1/2	3/4	1	11/4	11/2
& consider s	Catalogue No Standard Package. Weight Std. Pkg List Price, each		C2 100 120 lbs. \$ .41	C3 50 90 lbs. \$ .59	C4 20 75 lbs. \$ .94	C5 10 45 lbs. \$1.22
	Size in inches	2	21/2	3	31/2	4
	Catalogue No Standard Package. Weight Std. Pkg List Price, each	C6 5 35 lbs. \$2.43	C7 5 65 lbs. \$6.25	C8 5 70 lbs. \$7.40	C9 5 80 lbs. \$16.70	C10 5 90 lbs. \$18.30
	TYPE CO C	CONDULI	ET BODIE	ES-Black	Enamel Fi	nish
	Size in inches	1/2	3/4	1	11/4	11/2
	Catalogue No Standard Package. Weight Std. Pkg List Price, each	CO11 75 120 lbs. \$ .50	CO22 50 100 lbs. \$ .65	CO33 25 60 lbs. \$ .75	CO44 15 50 lbs. \$1.25	CO55 10 50 lbs. \$1.60
1270 In	Size in inches	2	21/2	3	31/2	4
	Catalogue No Standard Package. Weight Std. Pkg List Price, each	45 lbs.	CO77 5 70 lbs. \$7.80	CO88 5 80 lbs. \$9.25	CO99 5 100 lbs. \$21.00	CO1010 5 120 lbs. \$23.00
(A)	TYPE D C	ONDULE	T BODIE	S—Black	Enamel Fir	iish
	Size in inches	1/2	3/4	1	11/4	11/2
Marije.	Catalogue No Standard Package. Weight Std. Pkg List Price, each	D1 75 60 lbs. \$ .34	D2 50 60 lbs. \$ .41	D3 25 40 lbs. \$ .57	D4 15 50 lbs. \$ .94	D5 10 45 lbs. \$1.22
	Size in inches	2	21/2	3	31/2	4
	Catalogue No Standard Package. Weight Std. Pkg List Price, each	D6 5 35 lbs. \$2.43	D7 5 65 lbs. \$6,25	D8 5 70 lbs. \$7,40	D9 5 80 lbs. \$16.70	D10 5 90 lbs. \$18.30

Important Information Concerning Condulet Bodies Listed on This Page Obround covers and Obround Conduletto fittings of same size are interchangeable on above

Condulet bodies of corresponding size.

Proper fastening screws are furnished with Obround covers and Obround Conduletto fittings,

and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, see page 182. For cast brass and cast bronze Condulet bodies, plain and with special finishes, see page 182. For aluminum Condulet bodies, plain and with black enamel finish, see page 182. Black enameled and galvanized Condulet bodies of the same type and with the same size cover openings may be assorted to make up a standard package. No other assortment is allowed.

openings may be assorted to make up a standard package. No other assortment is allowed.

Obround covers are listed on pages 30, 31 and 32. Obround Conduletto fittings are listed on pages 184 and 185. Obround gaskets are listed on page 176. Condulet reducers are listed on page 171. Condulet bodies with Obround openings are listed on pages 21 to 29a, inclusive, and on page 181.

TYPE E

TYPE F

TYPE FE

Type E Condulet Bodies Take Obround Covers and Obround Conduletto Fittings Types F and FE Condulet Bodies Take Obround Covers Only

	TYPE E CO	NDULE	L BODI	ES-Bla	ck Enam	el Finis	h
	Size in inches	1/2	3/4	1	1	11/4	11/2
	Catalogue Number Standard Package Shipping Wt. Std. Pkg. List Price, each	E1 200 140 lbs.	E2 100 110 lb \$ .35	E3 50 80 l		lbs.	E5 10 40 lbs. \$1.04
	Size in inches	2	21/2		3	31/2	4
	Catalogue Number Standard Package Shipping Wt. Std. Pkg. List Price, each		E7 5 55 lbs \$5.35			lbs.	E10 5 70 lbs. \$12.70
	TYPE F COI	NDULET	BODI	ES-Blac	k Ename	el Finish	1
	Size in inches	1/2	3/4	10	1	11/4	11/2
<u> </u>	Catalogue Number Standard Package Shipping Wt. Std. Pkg. List Price, each	F1 100 150 lbs. \$ .50	F2 100 200 lb \$ .65	F3 50 175 \$1.0		5 lbs.	F5 10 65 lbs. \$2.52
	Size in inches	2	21/2		3	31/2	4
	Catalogue Number Standard Package Shipping Wt. Std. Pkg. List Price, each		F7 5 115 lb \$11.70			5 lbs.	F10 5 315 lbs. \$31.60
	TYPE FE CO	NDULE'	r BODI	ES—Bla	ck Enan	el Finis	h
	Size in inches	1/2	3/4 -	1	11/4	11/2	2
	Catalogue Number Standard Package Shipping Wt. Std. Pkg. List Price, each	FE1 100 240 lbs. \$ .50	FE2 100 350 lbs. \$ .65	FE3 50 240 lbs. \$1.05	FE4 20 175 lbs. \$1.64	FE5 10 130 lbs. \$2.52	FE6 5 100 lbs \$4.40
	Size in inches	21/2	3	31/2	4	5	6
	Catalogue Number Standard Package Shipping Wt. Std. Pkg. List Price, each	FE7 5 200 lbs. \$11.70	FE8 5 200 lbs. \$12.70	FE9 5 320 lbs. \$26,60	FE10 5 320 lbs. \$31.60	FE012 5 600 lbs. \$90.00	FE014 5 600 lbs. \$100.00

#### Important Information Concerning Condulet Bodies Listed on This Page

Obround covers and Obround Conduletto fittings of same size are interchangeable on above Condulet bodies of corresponding size, except that types F and FE Condulet bodies take Obround covers only.

Proper fastening screws are furnished with Obround covers and Obround Conduletto fittings, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, see page 182. For cast brass and cast bronze Condulet bodies, plain and with special finishes, see page 182. For aluminum Condulet bodies, plain and with black enamel finish, see page 182. Black enameled and galvanized Condulet bodies of the same type and size may be assorted to

make up a standard package. No other assortment is allowed.

Obround covers are listed on pages 30, 31 and 32. Obround Conduletto fittings are listed on pages 184 and 185. Obround gaskets are listed on page 176. Condulet reducers are listed on page 171. Condulet bodies with Obround openings are listed on pages 21 to 29a, inclusive, and on page 161.

TYPE LB

TYPE LF

TYPE LL

TYPE LR

Take Obround Covers and Obround Conduletto Fittings

	TYPE LB CONDI	JLET B	ODIES-	-Black E	namel Fi	nish
*	Size in inches	1/2	3/4	1	11/4	11/2
	Catalogue Number Standard Package Shipping Wt. Std. Pkg. List Price, each	200 175 lbs.	LE22 100 120 lbs. \$ .45	LB33 50 90 lbs. \$ .65	LB44 20 75 lbs. \$1.04	LB55 10 45 lbs. \$1.37
	Size in inches	2	21/2	3	31/2	4
	Catalogue Number Standard Package Shipping Wt. Std. Pkg. List Price, each	5 35 lbs.	LB77 5 60 lbs. \$6.55	LB88 5 70 lbs. \$7.70	LB99 5 80 lbs. \$17.10	LB1010 5 90 lbs. \$19.10
,	TYPE LF CONDU	JLET B	ODIES-	-Black E	namel Fi	nish
- MIN W	Size in inches	1/2	3/4	1	11/4	11/2
S Conduct ()	Catalogue Number Standard Package Shipping Wt. Std. Pkg. List Price, each	LF11 200 175 lbs. \$ .40	LF22 100 120 lbs. \$ .45	LF33 50 90 lbs. \$ .65	LF44 20 75 lbs. \$1.04	LF55 10 45 lbs. \$1.37
27.6	Size in inches	2	21/2	3	31/2	4
	Catalogue Number Standard Package Shipping Wt. Std. Pkg. List Price, each		LF77 5 60 lbs. \$6.55	LF88 5 70 lbs. \$7.70	LF99 5 80 lbs. \$17.10	LF1010 5 90 lbs. \$19:10
	TYPE LL CONDU	LET B	ODIES-	Black E	namel Fi	nish
	Size in inches	1/2	3/4	1	11/4	11/2
• 1	Catalogue Number Standard Package Shipping Wt. Std. Pkg. List Price, each	LL11 200 175 lbs. \$ .40	LL22 100 120 lbs. \$ .45	LL33 50 90 lbs. \$ .65	LL44 20 75 lbs. \$1.04	LL55 10 45 lbs. \$1.37
	Size m inches	2	21/2	3	31/2	4
Y	Catalogue Number Standard Package Shipping Wt. Std. Pkg. List Price, each	35 lbs.	LL77 5 60 lbs. \$6.55	LL88 5 70 lbs. \$7.70	LL99 5 80 lbs. \$17.10	LL1010 5 90 lbs. \$19.10
uli gramita anni e	TYPE LR CONDU	JLET B	ODIES-	-Black E	namel Fi	nish
THE REPORT OF STREET	Size in inches	1/2	3/4	1	11/4	11/2
	Catalogue Number Standard Package Shipping Wt. Std. Pkg. List Price, each	LR11 200 175 lbs. \$ .40	LR22 100 120 lbs. \$ .45	LR33 50 90 lbs. \$ .65	LR44 20 75 lbs. \$1.04	LR55 10 45 lbs. \$1.37
	Size in inches	2	21/2	3	31/2	4
presidente de la compania del compania de la compania del compania de la compania del compania de la compania de la compania de la compania del compania de la compania de la compania de la compania de la compania de la compania de la compania de la compania del compani	Catalogue Number Standard Package Shipping Wt. Std. Pkg. List Price, each	60 00	LR77 5 60 lbs. \$6.55	LR88 5 70 lbs. \$7.70	LR99 5 80 lbs. \$17.10	LR1010 5 90 lbs. \$19.10

. For finishes and other important information, see notes on page 26.

Black enameled and galvanized Condulct bodies of the same type and size may be assorted to make up a standard package. Black enameled and galvanized types LB, LF, LL and LR Condulct bodies of the same size may be assorted to make up a standard package. No other assortment is allowed.

Obround covers are listed on pages 30, 31 and 32. Obround Conduletto fittings are listed on pages 184 and 185. Obround gaskets are listed on page 176. Condulet reducers are listed on page 171.

Condulet bodies with Obround openings are listed on pages 21 to 29a, inclusive, and on page 161. Digitized by GOOGLE

(Cross Reference Page 24)

TYPE LBB

TYPE LFB

TYPE LLB

TYPE LRB

Take Obround Covers and Obround Conduletto Fittings



TYPE LBB CO	NDULE	L BODI	ES-Blac	k Ename	l Finish
Size in inches	1/2	3/4	1	11/4	11/2
Catalogue No Standard Pkg Weight Std. Pkg List Price, each	100 100 lbs.	75	LBB33 50 90 lbs. \$ .65	LBB44 20 75 lbs. \$1.04	LBB55 10 45 lbs. \$1.37
Size in inches	2	21/2	3	31/2	4
Catalogue No Standard Pkg Weight Std. Pkg List Price, each	LBB66 5 35 lbs. \$2.65	LBB77 5 60 lbs. \$6.55	LBB88 5 70 lbs. \$7.70	LBB99 5 80 lbs. \$17.10	LBB1010 5 90 lbs. \$19.10

# TYPE LFB CONDULET BODIES—Black Enamel Finish



Size in inches		3/4	1	11/4	11/2
Catalogue No	LFB11	LFB22	LFB33	LFB44	LFB55
Standard Pkg	100	75	50	20	10
Weight Std. Pkg	100 lbs.	95 lbs.	90 lbs.	75 lbs.	45 lbs.
List Price, each	<b>\$</b> .40	\$ .45	<b>\$</b> .65	\$1.04	\$1.37
Size in inches		21/2	3	31/2	4
Catalogue No	LFB66		3 LFB88		4 LFB1010
	LFB66	LFB77 5	5	LFB99 5	4 LFB1010 5
Catalogue No	LFB66 5	LFB77	3 LFB88 5 70 lbs.		4 LFB1010 5 90 lbs.

# TYPE LLB CONDULET BODIES-Black Enamel Finish



Size in inches		3/4	1	11/4	11/2
Catalogue No	LLB11	LLB22	LLB33	LLB44	LLB55
Standard Pkg	100	75	50	20	10
Weight Std. Pkg	100 lbs.	95 lbs.	90 lbs.	75 lbs.	45 lbs.
List Price, each	<b>\$</b> .40	<b>\$</b> .45	<b>\$</b> .65	\$1.04	\$1.37
Size in inches	2	21/2	3	31/2	4
Catalogue No	LLB66	LLB77	LLB88	LLB99	LLB1010
Standard Pkg	5	5	5	5	5
Weight Std. Pkg	35 lbs.	60 lbs.	70 lbs.	80 lbs.	90 lbs.
List Price, each		\$6.55	<b>\$7</b> .70	\$17.10	\$19.10

# TYPE LRB CONDULET BODIES—Black Enamel Finish



Size in inches		3/4	1	11/4	11/2
Catalogue No	LRB11	LRB22	LRB33	LRB44	LRB55
Standard Pkg	100	75	50	20	10
Weight Std. Pkg	100 lbs.		90 lbs.	75 lbs.	45 lbs.
List Price, each	<b>\$</b> .40	<b>\$</b> .45	<b>\$</b> .65	<b>\$</b> 1.04	<b>\$</b> 1.37
Size in inches	2	21/2	3	31/2	4
Catalogue No	LRB66	LRB77	LRB88	LRB99	LRB1010
Standard Pkg	5	5	5	5	5
Weight Std. Pkg	35 lbs.	60 lbs.	70 lbs.	80 lbs.	90 lbs.
List Price, each	\$2.65	<b>\$</b> 6.55	\$7.70	\$17.10	\$19.10

For finishes and other important information, see notes on page 26.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. Black enameled and galvanized types LBB, LFB, LLB and LRB Condulet bodies of the same size may be assorted to make up a standard package. No other assortment is allowed.

Obround covers are listed on pages 30, 31 and 32. Obround Conduletto fittings are listed on pages 184 and 185. Obround gaskets are listed on page 176. Condulet reducers are listed on page 171. Condulet bodies with Obround openings are listed on pages 21 to 29a, inclusive, and on page 161.

(Cross Reference Page 25)

TYPE LBL

# TYPE LU

TYPE U

TYPE UB

Take Obround Covers and Obround Conduletto Fittings



TYPE LBL CONDULET BODIES Black Enamel Finish					
Size in inches	1/2	3/4	1		
Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	50 60 lbs.	35 55 lbs.	25		





# TYPE LU CONDULET BODIES

Black Enamel Finish

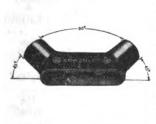
Size in inches	1/2	3/4	1
Catalogue Number Standard Package	50	LU222 35	LU333 25 60 lbs.
Ship. Wt. Std. Pkg List Price, each	70 lbs. \$ .65	65 lbs. \$ .80	\$ .95





Size in inches	1/2	3/4	1	11/4	11/2
Cat. No Std. Pkg Wt. Std. Pkg. List Price, ea.	100 100 lbs.	U22 50 80 lbs. \$ .57	U33 40 80 lbs. \$ .85	U44 20 75 lbs. \$1.19	U55 10 45 lbs. \$1.52
Size in inches	2	21/2	3	31/2	4
Cat. No Std. Pkg Wt. Std. Pkg. List Price, ea.	5 40 lbs.	U77 5 70 lbs. \$7.10	U88 5 75 lbs. \$8.10	U99 5 90 lbs. \$18.60	U1010 5 100 lbs. \$20.60

TYPE U CONDULET BODIES—Black Enamel Finish



TYPE UE	CONDU	JLET BO	DIES—Bla	ick Enamel	Finish
Size in inches	1/2	3/4	1	11/4	11/2
Cat. No Std. Pkg Wt. Std. Pkg . List Price, ea.	100 100 lbs.	UB22 50 80 lbs. \$ .57	UB33 40 80 lbs. \$ .85	UB44 20 75 ibs. \$1.19	UB55 10 45 lbs. \$1.52
Size in inches	2	21/2	3	31/2	4
Cat. No Std. Pkg Wt. Std. Pkg. List Price, ea.	5 40 lbs.	UB77 5 70 lbs. \$7.10	UB88 5 75 lbs. \$8.10	UB99 5 90 lbs. \$18.60	UB1010 5 100 lbs. \$20.60

Important Information Concerning Condulet Bodies Listed on This Page

Obround covers and Obround Conduletto fittings of same size are interchangeable on above

Condulet bodies of corresponding size.

Proper fastening screws are furnished with Obround covers and Obround Conduletto fittings, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, see page 182. For cast brass and cast bronze Condulet bodies, plain and with special finishes, see page 182. For aluminum Condulet bodies, plain and with black enamel finish, see page 182. Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Obround covers are listed on pages 30, 31 and 32. Obround Conduletto fittings are listed on page 185. Obround gaskets are listed on page 176. Condulet reducers are listed on page 171. Condulet bodies with Obround openings are listed on pages 21 to 29a, inclusive.

# TYPE T

#### Takes Obround Covers and Obround Conduletto Fittings

			TYPE T	CONDU	LET BOD	IES—Blaci	k Enamel 1	Pinish
	5	Siz	e in inche	8	1/2 1/2	1/2 1/2	1/2 1/2	3/43/4
		St	t. Nod. Pkgt. Std. Pk	g	120 lbs.	T121* 100 120 lbs.	T131 100 90 lbs.	T212* 75 75 lbs.
			st Price, e			\$ .56	<b>8</b> .63	\$ .57
Size in inches	3/4 - 3/4 3/4	3/4 3/4	3/4 - 3/4 11/4	$\frac{3}{4} \frac{3}{11/2}$	1——1	1-1-1	1-1	1 11/4
Cat. No	T222*	T232	T242	T252	T313	T323	T333*	T343
Std. Pkg	75 05 1b.a	75 05 lbs	75	75 120 lbs.	50	50 100 lbs.	50	50
Wt. Std. Pkg. List Price, ea.		95 lbs. \$ .65	100 lbs. \$ .77	\$ .90	95 lbs. \$ .80	\$ .80	105 lbs.	115 lbs. \$ .97
Size in inches	1 11/2		,——	11/4-11/4	'	·	·	11/4 11/4
Cat. No	T353*	T363*	T414	T424	T 434	T444	T 454	T 464
Std. Pkg	50	50	20	20	20	20	20	20
Wt. Std. Pkg.		135 lbs.	70 lbs.	75 lbs.	80 lbs.	85 lbs.	90 lbs.	95 lbs.
List Price, ea.		\$1.45	\$1.22	\$1.22	\$1.22	\$1.22	\$1.50	\$1.96
Size in inches	$1\frac{1}{2}\frac{1}{1}\frac{1}{2}$	1½ <del>+</del> 1½ 3/4	11/2 11/2	$1\frac{1}{2}\frac{1\frac{1}{2}}{1\frac{1}{4}}$	$1\frac{1}{2}\frac{1\frac{1}{2}}{1\frac{1}{2}}$	11/2 11/2	2 - 2	22
Cat. No	T515	T 525	T535	T 545	T555	T 565	T616	T626
Std. Pkg	10	10	10	10	10	10	5	5
Wt. Std. Pkg.		45 lbs.	50 lbs.	50 lbs.	50 lbs.	95 lbs.	95 lbs.	100 lbs.
List Price, ea.	\$1.69	\$1.69	\$1.69	\$1.69	\$1.69	<b>\$2.52</b>	\$2.55	\$2.55
Size in inches	2 2	2 2	$2{1^{1}/_{2}}^{2}$	22	$2\frac{1}{2}$ $\frac{2\frac{1}{2}}{1\frac{1}{2}}$	<sup>21</sup> / <sub>2</sub>	$2^{1/2} \frac{1}{1} \frac{2^{1/2}}{2^{1/2}}$	33
Cat. No	T636	T646	T656	T666	T 757	T767	T777	T868
Std. Pkg		5	5	5	5	5	5	5
Wt. Std. Pkg. List Price, ea.		115 lbs. \$2.55	125 lbs. \$2.55	135 lbs. \$2.55	95 lbs. \$7.45	100 lbs. \$7.45	105 lbs. \$7.45	115 lbs. \$8.15
Size in inches	33		$\frac{3\frac{1}{2}}{3\frac{1}{2}}$		, <del></del>	<u> </u>	4 4 31/2	4
Cat. No	T878	T888	T979	T989	T999	T108	T109	T 1010
Std. Pkg	5	5	5	5	50 11-	5	5	5
Wt. Std. Pkg. List Price, ea.	\$8.15	135 lbs. \$8.15	45 lbs. \$22.60	45 lbs. \$22.60	50 lbs. \$22.60	50 lbs. \$24.60	50 lbs. \$24.60	55 lbs. \$24.60

#### Important Information Concerning Condulet Bodies Listed on This Page

The size of cover required for type T Condulet body is the same size as the conduit hubs at the ends of the cover opening.

Obround covers and Obround Conduletto fittings of same size are interchangeable on above Condulet bodies of corresponding size.

Proper fastening screws are furnished with Obround covers and Obround Conduletto fittings, and are so held in screw holes that they can not fall out.

For finishes, see page 26.

Black enameled and galvanized Condulet bodies of the same type and with the same size cover openings may be assorted to make a standard package. No other assortment is allowed.

1/2, 3/4 and 1-inch types T, TB and X Condulet bodies are regularly furnished with larger wiring chamber than other Obround Condulet bodies of corresponding size. These Condulet bodies will be furnished with wiring chamber of the same size as other Obround Condulet bodies, if specifically ordered, using regular catalogue numbers and specifying "Smaller Wiring Chamber."

Obround covers are listed on pages 30, 31 and 32. Obround Conduletto fittings are listed on page 185.
Obround gaskets are listed on page 176. Condulet reducers are listed on page 171.
Condulet bodies with Obround openings are listed on pages 21 to 298, inclusive.

TYPE TB

# TYPE TL

TYPE TR

Take Obround Covers and Obround Conduletto Fittings

lake v	Obround Covers an	a Obround	Conduie	tto ritting	S	
	TYPE TB C	ONDULE	T BODIE	S-Black	Enamel F	inish
	Size in inches	1/2	3/4	1	11/4	11/2
	Catalogue No Standard Package. Ship. Wt. Std. Pkg. List Price, each	TB111* 200	TB222* 100 120 lbs. \$ .57	TB333* 50 90 lbs. \$ .80	TB444 20 75 lbs. \$1.22	TB555 10 45 lbs. \$1.69
	Size in inches	2	21/2	3	31/2	4
	Catalogue No Standard Package. Ship. Wt. Std. Pkg. List Price, each	35 lbs.	TB777 5 60 lbs. \$7.45	TB888 5 70 lbs. \$8.15	TB999 5 80 lbs. \$22.60	TB1010 5 90 lbs. \$24.60
	TYPE TL C	ONDULE	T BODIE	S-Black	Enamel F	inish
	Size in inches	1/2 1/2	1/2 1/2	1/2 1/2	3/4 - 3/4	3/4 3/4
1	Catalogue No Standard Package. Ship. Wt. Std. Pkg. List Price, each		TL121 100 100 lbs. \$ .56	TL131 100 105 lbs. \$ .63	TL212 50 115 lbs. \$ .57	TL222 50 125 lbs. \$ .57
	Size in inches	3/4 <del>3</del> /4	1-1-1	1-1-1	1-1-1	1 <sup>1</sup> / <sub>4</sub>
	Catalogue No Standard Package. Ship. Wt. Std. Pkg. List Price, each		TL313 40 100 lbs. \$ .80	TL323 40 100 lbs. \$ .80	TL333 40 100 lbs. \$ .80	TL444 20 75 lbs. \$1.22
The second secon	TYPE TR C	ONDULE	T BODIE	S-Black	Enamel Pi	nish
	Size in inches	1/2 1/2	1/2 1/2	1/2 1/2	3/4 <del>1</del> /2	3/43/4 3/4
	Catalogue No Standard Package. Ship. Wt. Std. Pkg. List Price, each	TR111 100 95 lbs. \$ .48	TR121 100 100 lbs. \$ .56	TR131 100 105 lbs. \$ .63	TR212 50 115 lbs. \$ .57	TR222 50 125 lbs. \$ .57
	Size in inches	3/4 3/4	1 1/2	1-1-1	1 1	11/4 <del></del> 11/4
	Catalogue No Standard Package. Ship. Wt. Std. Pkg. List Price, each	135 lbs.	TR313 40 100 lbs. \$ .80	TR323 40 100 lbs. \$ .80	TR333 40 100 lbs. \$ .80	TR444 20 75 lbs. \$1.22

The size of cover required for a type TL or TR Condulet body is the same size as the conduit hubs at the ends of the cover opening.

Obround covers and Obround Conduletto fittings of same size are interchangeable on above

Condulet bodies of corresponding size.

Proper fastening screws are furnished with Obround covers and Obround Conduletto fittings, and are so held in screw holes that they can not fall out.

Assortments: Black enameled and galvanized Condulet bodies of the same type and with the same size cover openings may be assorted to make up a standard package. Black enameled and galvanized types TL and TR Condulet bodies with the same size cover openings may be assorted to make up a standard package. No other assortment is allowed.

\*1/2, 3/4 and 1-inch types T, TB and X Condulet bodies are regularly furnished with larger wiring chamber than other Obround Condulet bodies of corresponding size. These Condulet bodies will be furnished with wiring chamber of the same size as other Obround Condulet bodies, if specifically ordered, using regular catalogue numbers and specifying "Smaller Wiring Chamber."

For finishes, see note on page 26. Obround covers are listed on pages 30, 31 and 32. Obround Conduletto fittings are listed on page 185. Obround gaskets are listed on page 176. Condulet reducers are listed on page 171.

Condulet bodies with Obround openings are listed on pages 21 to 29a, inclusive. by

#### Takes Obround Covers and Obround Conduletto Fittings

		TY	PE X CO	ONDULET	BODIES	Black E	namel Fini	sh
_, [	-	Size in i	nches		1/2 1/2	3/4 <del>  1/2</del> 1/2	3/4 <del>1/2</del> 3/4	3/ <sub>4</sub> - 3/ <sub>4</sub> 3/ <sub>4</sub>
		Standard	e Number l Package : Weight S ee, each	td. Pkg	X1111* 75 95 lbs. \$ .60	X2111 50 65 lbs. \$ .77	X2112* 50 70 lbs. \$ .77	X2222* 50 85 lbs. \$ .77
Size in inches		1 + 3/4	1 <del>1</del> 3/ <sub>4</sub> 3/ <sub>4</sub>	$1\frac{1/2}{1}$ $1\frac{1}{1/2}$	3/ <sub>4</sub> 1 1 1 1 3/ <sub>4</sub>	1+1	$1\frac{1}{4}\frac{1}{1}$	1 <sup>1</sup> / <sub>4</sub> - 3/ <sub>4</sub> 3/ <sub>4</sub>
Catalogue Nu Standard Pac Weight Std. I List Price, ea	kage Pkg	X3112 35 50 lbs. \$1.05	X3222 35 45 lbs. \$1.05	X3113 35 50 lbs. \$1.05	X3223 35 60 lbs. \$1.05	X3333* 35 75 lbs. \$1.05	X4113 20 55 lbs. \$1.24	X4222 20 60 lbs. \$1.24
Size in inches		$1\frac{3}{4}$ $1\frac{1}{4}$ $\frac{3}{4}$ $1$	11/4 1	$1\frac{1}{4} + \frac{1}{1} \frac{1}{4}$	$1\frac{3/4}{1/4}$ $1\frac{1}{4}$	$1\frac{1}{4}$ $1\frac{1}{4}$ $1\frac{1}{4}$	1½- 1½- 1½- 1½- 1½-	$1\frac{3}{4}$ $1\frac{1}{2}$ $\frac{1}{3}\frac{1}{4}$
Catalogue Nu Standard Pac Weight Std. I List Price, ea	kage Pkg	X4223 20 65 lbs. \$1.24	X4333 20 70 lbs. \$1.24	X4114 20 75 lbs. \$1.24	X4224 20 80 lbs. \$1.24	X4444 20 85 lbs. \$1.24	X5114 10 40 lbs. \$1.78	X5224 10 45 lbs. \$1.78
Size in inches		$1\frac{3}{4}$ $1\frac{1}{2}$ $\frac{3}{4}$ $1\frac{1}{2}$	11/2 1	11/2 11/4	11/2 11/2	$1\frac{1\frac{1}{2}}{1\frac{1}{2}}1\frac{1}{2}$ $1\frac{1}{2}$	2 1½ 2 1½ 1½	2 <del>1</del> 1 1 3/4
Catalogue Nu Standard Pac Weight Std. I List Price, ea	kage Pkg	X5225 10	X5333 10 50 lbs. \$1.78	X5334 10 55 lbs. \$1.78	X5335 10 55 lbs. \$1.78	X5555 10 60 lbs. \$1.78	X6115 5 35 lbs. \$2.85	X6225 5 35 lbs. \$2.85
Size in inches	2 1 11/2	2 1 2	2 2 2	$2^{1/2} + 1^{1/2}$	$2^{1/2} + 1^{1/2}$ $1^{1/2}$ $1^{1/2}$	$ \begin{array}{c} 1^{1/2} \\ 2^{1/2} + 2^{1/2} \\ 1^{1/2} \end{array} $	$ \begin{array}{c c} 2^{1/2} \\ 2^{1/2} & 2^{1/2} \\ 2^{1/2} & 2^{1/2} \end{array} $	$3\frac{11/2}{3+2}$ $11/2$
Cat. No Std. Pkg Wt. Std. Pkg. List Price, ea.		X6336 5 40 lbs. \$2.85	X6666 5 45 lbs. \$2.85	X7335 5 70 lbs. \$8.95	X7555 5 75 lbs. \$8.95	X7557 5 75 lbs. \$8.95	X7777 5 75 lbs. \$8.95	X8556 5 80 lbs. \$9, 95
Size in inches	3 - 21/2	3 3 3	31/2 - 21/2	$ \begin{array}{c c} 2^{1/2} \\ 3^{1/2} & 3 \\ 2^{1/2} \end{array} $	$ \begin{array}{c c} 3\frac{1}{2} \\ 3\frac{1}{2} & 3\frac{1}{2} \\ 3\frac{1}{2} & 3\frac{1}{2} \end{array} $	$4\frac{2^{1/2}}{4}$ $3$ $2^{1/2}$	4 3 31/2	4 4
Cat. No Std. Pkg Wt. Std. Pkg. List Price, ea.		X8888 5 90 lbs. \$9.95	X9667 5 95 lbs. \$25.00	X9778 5 100 lbs. \$25.00	X9999 5 105 lbs. \$25.00	X1078 5 105 lbs. \$27.00	X 1089 5 110 lbs. \$27.00	X1010 5 115 lbs. \$27.00

The size of cover required for type X Condulet body is the same size as the largest conduit hub. Obround covers and Obround Conduletto fittings of same size are interchangeable on above Condulet bodies of corresponding size.

For finishes, see page 26.

Black enameled and galvanized type X Condulet bodies with the same size cover openings may be assorted to make up a standard package. No other assortment is allowed.

Obround covers are listed on pages 30, 31 and 32. Obround Conduletto fittings are listed on page 185.
Obround gaskets are listed on page 176. Condulet reducers are listed on page 171
Condulet bodies with Obround openings are listed on pages 21 to 292, inclusive.

<sup>\*1/2, 3/4</sup> and 1-inch types T, TB and X Condulet bodies are regularly furnished with larger wiring chamber than other Obround Condulet bodies of corresponding size. These Condulet bodies will be furnished with wiring chamber of the same size as other Obround Condulet bodies, if specifically ordered, using regular catalogue numbers and specifying "Smaller Wiring Chamber."

TYPES DF, LFM, LFN, TM AND TMD Condulets for Gooseneck Brackets and Similar Installations

Types DF and TM Condulet Bodies Take Obround Covers only
Types LFM, LFN and TMD Condulet Bodies Take Obround Covers and Obround Conduletto
Fittings



# TYPE DF CONDULET BODIES

Black Enamel Finish

Size in inches.	1/2	3/4	1	
Cat. No.	DF1	DF2	DF3	
Std. Pkg.	35	35	35	
Wt. Std. Pkg.	100 lbs.	120 lbs.	160 lbs.	
List, each	\$1.15	\$1.30	\$1.55	



Type DF Condulet with gooseneck bracket and type VA Condulet.



#### TYPE LFM CONDULET BODIES

Black Enamel Finish

Size in inches.	1/2	3/4	1
Cat. No Std. Pkg	LFM11	LFM22	LFM33
	35	35	35
	90 lbs.	100 lbs.	110 lbs.



Type LFM Condulet with gooseneck bracket and type WV Condulet.



#### TYPE LFN CONDULET BODIES

Black Enamel Finish

Size in inches.	1/2	3/4	1
Cat. No. Std. Pkg. Wt. Std. Pkg. List, each	LFN11	LFN22	LFN33
	35	35	35
	90 lbs.	100 lbs.	110 lbs.
	\$1.15	\$1.30	\$1.55



Type LFN Condulet with lighting fixture.



# TYPE TM CONDULET BODIES

Black Enamel Finish

Black Blatter Tillian									
Size in inches.	1/2	3/4	1						
Cat. No	TM111	TM222	TM333						
Std. Pkg Wt. Std. Pkg	35 100 lbs.	35 110 lbs.	35 125 lbs.						
List, each	\$1.30	\$1.45	\$1.70						



Type TM Condulet with gooseneck bracket and type WV Condulet.



# TYPE TMD CONDULET BODIES

Black Enamel Finish

Size in ins.	1/2	3/4	1
Cat. No Std. Pkg Wt. Pkg List, each	TMD111 35 105 lbs. \$1.55	35	TMD333 35 130 lbs. \$1.95



Type TMD Condulet with gooseneck bracket and type WV Condulet.

Obround Covers are listed on pages 30, 31 and 32. Obround Conduletto fittings are listed on page 185.

Obround Gaskets are listed on page 176. Condulet reducers are listed on page 171.

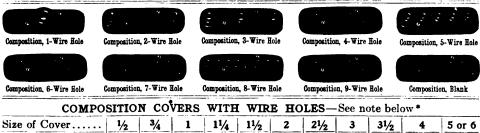
Condulet bodies with Obround openings are listed on pages 21 to 29a, inclusive.

(Cross Reference Page 29a)

#### OBROUND COVERS

For Types A, B, BE, C, CO, D, DF, E, F, FE, LB, LBA, LBB, LBL, LBV, LF, LFM, LL, LLB, LR, LRB, LU, T, TB, TJD, TL, TM, TR, U, UB and X Condulet Bodies

Furnished with Fastening Screws



	COMPO	SITIO	M CO	VERS	WITE	WIR	E HO	LES-	See no	ote bel	ow *	
Size of Cov	er	1/2	3/4	1	11/4	11/2	2	21/2	3	31/2	4	5 or 6
Std. Pkg. A	ssorted.	200	100	50	20	10	5	5	5	5	5	5
1-wire Standard†	Cat. No. List, ea.					CF51 \$1.10				¢¥91 <b>\$2</b> .50		CF1401 \$4.00
1-wire Special†	Cat. No. List, ea.			(F318 \$ .50		CF518 \$1.10				CF918 \$2.50	CF10018 \$2.50	Not made
2-wire	Cat. No. List, ea.	\$ .20						CF72 \$1.60	CF82 \$1.60			CF1402 \$4.00
3-wire	Cat. No. List, ea.	\$ .20	\$ .30	<b>\$</b> .50	\$1.00	\$1.10	\$1.20	\$1.60	\$1.60	<b>\$</b> 2.50	L .	(F1403 \$4.00
4-wire	Cat. No. List, ea.	\$ .20	\$ .30	\$ .50	\$1.00	\$1.10	\$1.20	\$1.60	\$1.60	<b>\$2.50</b>	\$2.50	<b>\$</b> 4.00
5-wire	Cat. No. List, ea.	made	\$ .30	\$ .50	\$1.00	\$1.10	\$1.20	\$1.60	\$1.60	\$2.50	\$2.50	CF14500 \$4.00
6-wire	Cat. No. List, ea.	made	\$ .30	\$ .50	\$1.00	\$1.10	<b>\$1.20</b>	\$1.60	<b>\$1.60</b>	\$2.50	\$2.50	CF14600 \$4.00
7-wire	Cat. No. List, ea.		made	\$ .50	\$1.00	\$1.10	\$1.20	\$1.60	\$1.60	\$2.50	\$2.50	(F14700 \$4.00
8-wire	Cat. No. List, ea.		made	\$ .50	<b>\$</b> 1.00	<b>\$</b> 1.10	\$1.20	\$1.60	\$1.60	<b>\$2.50</b>	\$2.50	\$4.00
9-wire	Cat. No. List, ea.	made	made	\$ .50	\$1.00	\$1.10	\$1.20	\$1.60	\$1.60	\$2.50	\$2.50	CF14900 \$4.00
Blank	Cat. No. List, ea.	\$ .20	\$ .30	\$ .50	\$1.00	\$1.10	\$1.20	\$1.60	<b>\$1.60</b>	\$2.50	\$2.50	CF14000 \$4.00
Weight Std	l. Pkg	40 lbs.	30 lbs.	20 lbs.	20 lbs.	18 lbs.	12 lbs.	18 lbs	25 lbs.	30 lbs.	40 lbs.	50 lbs.



# OBROUND PORCELAIN COVERS WITH 1-WIRE HOLE AND 1/8 MALE NIPPLE

Size of Cove	r	1/2	3/4	1.
For Drop Cord and Fixture Pull	Catalogue No Standard Pkg Weight Std. Pkg List Price, each	191 200 55 lbs.	40 lbs.	

†Standard and special 1-wire hole covers differ only in diameter of wire hole; see schedule on page 172. Standard 1-wire hole covers will always be furnished, unless order specifically calls for special 1-wire hole covers.

Obround covers are interchangeable on corresponding sizes of Condulet bodies with Obround openings. 2½ and 3-inch Obround covers are interchangeable. 3½ and 4-inch Obround covers are interchangeable.

Above composition Obround covers of the same size may be assorted to make up a standard package, regardless of style of cover.

Assortment specified on page 32 applies to above Obround porcelain covers 191, 291 and 391. Standard package discount is allowed on covers when an order is for a standard package of Condulet bodies and an equal number of covers for those bodies; but on an order for covers alone, standard package discount is allowed, only, on the specified standard package quantity of covers.

\*For diameter of wire holes in covers, see page 172.

Obround gaskets are listed on page 176. Condulet bodies that take Obround covers are listed on pages 21 to 29a, inclusive.

#### **OBROUND COVERS**

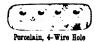
For Types A, B, BE, C, CO, D, DF, E, F, FE, LB, LBA, LBB, LBL, LBV, LF, LFB, LFM, LL, LLB, LR, LRB, LU, T, TB, TJD, TL, TM, TR, U, UB AND X Condulet Bodies

#### Furnished with Fastening Screws





















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Porcelain, 7-Wire Hole

Blank Metal

Size of Cover	1/2	3/4
Std. Pkg. Assorted	200	100

rcelain,	8-Wire	Hole	Porcelai	n, for	W 64	ther-Proc	f Soc	ke
								_
		. 1					1	_

5 or 6 5

PORCELA	IN COVERS	WITH	WIRE	HOLE	S—Se	e note l	below*	

1-wire	Cat. No.		21	31	41	51	61	71	81	91	101	1401
Standard †	List, ea	<b>3</b> .10	<b>3</b> .15	<b>\$</b> .25	<b>\$</b> .36	<b>\$</b> .48	<b>\$</b> .60	\$ .80	\$ .80	\$ .90	<b>\$</b> .90	\$2.00
1-wire	Cat. No.	11S	21S	31S	41S	$5\overline{1S}$	61S	71S	81S	918	1018	Not
Special†	List, ea	\$ .10	\$ .15	\$ .25	\$ .36	\$ .48	\$ .60	\$ .80	\$ .80	\$ .90	\$ .90	made
2-wire	Cat. No.	12	22	32	42	<b>52</b>	62	72	82	92	102	1402
Z-WILE	List, ea	\$ .10	\$ .15	\$ .25	<b>\$</b> .36	<b>\$.48</b>	\$ .60	\$ .80	\$ .80	\$ .90	\$ .90	\$2.00
3-wire	Cat. No.	13	23	33	43	53	63	73	83	93	103	1403
2-MITE	List, ea	\$ .10	<b>\$</b> .15	<b>\$</b> .25	\$ .36	<b>\$ .4</b> 8	\$ .60	\$ .80	\$ .80	\$ .90	\$ .90	\$2.00
4	Cat. No.	1400	2400	3400	4400	5400	6400	7400	8400	9400	10400	14400
4-wire	List, ea	\$ .10	<b>8</b> .15	<b>\$</b> .25	\$ .36	<b>\$</b> .48	\$ .60	8 .80	\$ .80	\$ .90	\$ .90	<b>\$2.00</b>
<b>5</b>	Cat. No.	Not	2500	3500	4500	5500	6500	7500	8500	9500	10500	14500
5-wire	List, ea	made	\$ .15	\$ .25	\$ .36	\$ .48	\$ .60	\$ .80	\$ .80	\$ .90	\$ .90	\$2.00
6-wire	Cat. No.	Not	2600	3600	4600	5600	6600	7600	8600	9600	10600	14600
0-MILG	List, ea	made	\$ .15	\$ .25	\$ .36	\$ .48	\$ .60	\$ .80	\$ .80	\$ .90	\$ .90	\$2.00
7-wire	Cat. No.	Not	Not	3700	4700	5700	6700	7700	8700	9700	10700	14700
1-MITE	List, ea	made	made	\$ .25	\$ .36	\$ .48	\$ .60	\$ .80	\$ .80	\$ .90	\$ .90	\$2.00
8-wire	Cat. No.	Not	Not	3800	4800	5800	6800	7800	8800	9800	10800	14800
O-MIT 6	List, ea	made	made	\$ .25	\$ .36	<b>\$</b> .48	\$ .60	\$ .80	\$ .80	\$ .90	\$ .90	\$2.00
	Cat. No.	Not	Not	3900	4900	5900	6900	7900	8900	9900	10900	14900
9-wire	List, ea	made	made	\$ .25	\$ .36	\$ .48	\$ .60	\$ .80	\$ .80	\$ .90	\$ .90	\$2.00
For	Cat Na	14	04	24	Standa	rd and s	pecial 1-	wire hole	covers d	iffer only	in diar	neter of
₩. P.	Cat. No.	14	24	34	wire h	ole; see s	chedule	on page l	172., Ste	indard 1	wire hole	e covers
Socket	List, ea	\$ .16	<b>\$</b> .25	\$ .40	l-wire	hole co		ed, unless	s order sp	pecincally	y caus to	Labeciai
Weight S	td. Pkg	50 lbs.	35 lbs.	25 lbs	<u></u>			20 lbs	20 lbs	30 lbs.	30 lbs.	40 lbs.
			1	1 -0 100.		,	1 -0 -000		1 -0 -00	.,		

#### BLANK METAL COVERS—Black Enamel Finish

Sheet	Cat. No.	100	200	300	400	500	600	700	800	900	1000	14000
	List, ea	8 08	\$ 11	\$ 23	\$ 32	\$ 45	8 56	\$ 75	8 75	8 80	8 80	81.25
Weight S	Std. Pkg	30 lbs.	15 lbs.	10lbs.	10 lbs.	10lbs.	5 lbs.	10 lbs.	10lbs.	15 lbs.	15 lbs.	20 lbs.
Cast	Cat. No.	100f	200f	300f	400f	500f	600f	700f	800f	900f	1000f	14000f
Iron	List, ea	\$ .16	\$ .22	\$ .35	\$ .50	\$ .70	\$ .90	\$1.15	\$1.15	\$1.25	\$1.25	\$1.75
Weight S	Std. Pkg	90 lbs.	60 lbs.	$\overline{35  \mathrm{lbs}}$ .	25 lbs.	15 lbs.	10 lbs.	10lbs.	15 lbs.	20 lbs.	25 lbs.	30 lbs.

<sup>\*</sup>For diameter of wire holes in covers, see page 172.

For finishes, assortments, and other important information, see notes on opposite page.

Obround gaskets are listed on page 176.

Condulet bodies that take Obround covers are listed on pages 21 to 29a, inclusive ized by

#### OBROUND COVERS—Continued

	Size of	Cover	1/2	3/4	1	11/4	11/2
CHOUSE O 6	Std. Pkg	g. Assorted	200	100	50	20	10
HINDY	1	METAL COVER	s WITH	NIPPLE	ES-Black	Enamel Fi	nish
Metal, 1/8 Male Nipple	1/8 Male	Catalogue No. List, each	15 \$ .20	25 \$ .25	35 \$ .35	\$ .46	55 \$ .58
CALUSE OF HIROS	1/8 Female	Catalogue No. List, each	16 \$ .20	26 \$ .25	36 \$ .35	46 \$ .46	56 \$ .58
Metal, 1/8 Female Nipple	1/4 Male	Catalogue No. List, each	113 \$ .23	213 \$ .28	313 \$ .38	413 \$ .49	513 \$ .61
CRJUST P	1/4 Female	Catalogue No. List, each	114 \$ .23	214 \$ .28	314 \$ .38	414 \$ .49	514 \$ .61
Metal, 3% Male Nipple	3/8 Male	Catalogue No. List, each	17 \$ .25	27 \$ .30	\$ .40	47 \$ .51	57 \$ .63
, 78 mate trippe	3/8 Female	Catalogue No. List, each	18 \$ .25	28 \$ .30	38 \$ .40	48 \$. 51	58 \$ .63
CRAUSE PHONES	Male	Catalogue No. List, each	Not made	215 \$ .35	315 \$ .45	415 \$ .56	515 \$ .68
Metal, 3/8 Female Nipple	1/2 Female	Catalogue No. List, each	Not made	216 \$ .35	316 \$ .45	416 \$ .56	516 \$ .68
	Ship. W	eight Std. Pkg.	40 lbs.	25 lbs.	20 lbs.	10 lbs.	10 lbs
200		PORCEL	AIN CO	VERS W	ITH NIP	PLES	
CROUSE/HINDS	1/8 Male	Catalogue No. List, each	19 \$ .25	29 \$ .30	\$ .43	\$ .58	59 \$ .72
orcelain, 1/8 Male Nipple	1/8 Female	Catalogue No. List, each	110 \$ .25	210 \$ .30	310 \$ .43	410 \$ .58	510 \$ .72
POWOUS E-NI NOS	1/4 Male	Catalogue No. List, each	119 \$ .30	219 \$ .35	319 \$ .48	419 \$ .63	519 \$ .77
rcelain, 1/8 Female Nipple	1/4 Female	Catalogue No. List, each	120 \$ .30	220 \$ .35	320 \$ .48	420 \$ .63	520 \$ .77
.503:	3/8 Male	Catalogue No. List, each	111 \$ .35	211 \$ .41	311 \$ .53	411 ° \$ .68	511 \$ .82
orcelain, 3% Male Nipple	3/8 Female	Catalogue No. List, each	112 \$ .35	212 \$ .41	312 \$ .53	412 \$ .68	512 \$ .82
	1/2 Male	Catalogue No. List, each	121 \$ .40	221 \$ .46	321 \$ .58	421 \$ .73	521 \$ .87
Perforse-Minos	1/2 Female	Catalogue No. List, each	122 \$ .40	222 \$ .46	322 \$ .58	422 \$ .73	522 \$ .87
rcelain, 3/8 Female Nipple	Ship. W	eight Std. Pkg.	60 lbs.	40 lbs.	30 lbs.	30 lbs.	25 lbs

Obround covers are interchangeable on corresponding sizes of Condulet bodies with Obround openings. 2½ and 3-inch Obround covers are interchangeable. 3½ and 4-inch Obround covers are interchangeable.

Proper fastening screws are furnished with covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for metal covers, and will be furnished unless another finish is specified on the order. Galvanized finish will be furnished, if specifically ordered, at same price as black enamel finish. For special plated finishes see page 182. For brass and bronze covers, plain and with special finishes, see page 182. For aluminum covers, plain and with black enamel finish, see page 182.

Black enameled, galvanized and porcelain Obround covers of the same size may be assorted to make up a standard package, regardless of style of cover. No other assortment is allowed. Standard package discount is allowed on covers when an order is for a standard package of Condulet bodies and an equal number of covers for those bodies; but on an order for covers

Condulet bodies and an equal number of covers for those bodies; but on an order for covers alone, standard package discount is allowed, only, on the specified standard package quantity of covers.

Obround gaskets are listed on page 176. Condulet bodies that take Obround covers are listed on pages 21 to 29a, inclusive.

#### CONDULET BODIES-FS SERIES, SHALLOW TYPE

# TYPES FS, FSA, FSC, FSL AND FSR

For Single Push Button, Double Push Button or Flush Rotary Switches (Shallow); Flush Plug Receptacles (Shallow), and Porcelain or Metal Covers

Over-all Dimensions of Body, Exclusive of Hubs: Length, 4 9-32 Inches; Width, 2 3-4 Inches; Depth, 1 7-8 Inches. Furnished with Fastening Screws for Fittings

#### TYPE FS CONDULET BODIES—Black Enamel Finish

Size in inches	1/2	3/4	1
Catalogue Number	75 165 lbs.	FS2 50 120 lbs. \$ .75	FS3 25 65 lbs. \$ .85

#### TYPE FSA CONDULET BODIES-Black Enamel Pinish

Size in inches	1/2	3/4	1
Catalogue Number Standard Package Shipping Weight Std. Pkg List Price, each	50 140 lbs.	FSA2 30 75 lbs. \$ .75	FSA3 20 60 lbs. \$ .85

# TYPE FSC CONDULET BODIES—Black Enamel Finish

Size in inches	1/2	3/4	1
Catalogue Number	75 175 lbs.	FSC22 50 150 lbs. \$ .90	FSC33 25 90 lbs. \$1.10

#### TYPE FSL CONDULET BODIES—Black Enamel Finish

Size in inches	1/2	3/4	1
Catalogue Number Standard Package Shipping Weight Std. Pkg List Price, each	50 130 lbs.	FSL22 30 80 lbs. \$ .90	FSL33 20 60 lbs. \$1.10

# TYPE FSR CONDULET BODIES—Black Enamel Finish

Size in inches	1/2	3/4	1
Catalogue Number	50   130 lbs.	FSR22 30 80 lbs. \$ .90	FSR33 20 60 lbs. \$1.10

Covers for above Condulet bodies are listed on pages 46 and 47. We will furnish switches or receptacles for above Condulet bodies, and enumerate them on page 41. For finishes and assortments, see note on page 41. Gasket is listed on page 176. Condulet reducers are listed on page 171.

#### CONDULET BODIES-FS SERIES, SHALLOW TYPE-Continued

## TYPES FSLA, FSS, FSCC, FSCA AND FSCT

For Single Push Button, Double Push Button or Flush Rotary Switches (Shallow); Flush Plug Receptacles (Shallow), and Porcelain or Metal Covers

Over-all Dimensions of Body, Exclusive of Hubs: Length, 49-32 Inches; Width, 23-4 Inches; Depth, 17-8 Inches. Furnished with Fastening Screws for Fittings

#### TYPE FSLA CONDULET BODIES—Black Enamel Finish

Size in inches	1/2	3/4	1
Catalogue Number Standard Package Ship. Weight Std. Pkg. List Price, each	50 130 lbs.	FSLA22 30 80 lbs. \$ .90	FSLA33 20 60 lbs. \$1.10

#### TYPE FSS CONDULET BODIES-Black Enamel Finish

Size in inches	1/2	3/4	1
Catalogue Number	50	FSS22 30 80 lbs. \$ .90	FSS33 20 60 lbs. \$1.10

#### TYPE FSCC CONDULET BODIES—Black Enamel Finish

	Size in inches	1/2 in. main 1/2 inch branches	½ inch	$\frac{1}{2}$ inch
**	Catalogue Number	50 140 lbs.	30	FSCC311 20 70 lbs. 1.45

#### TYPE FSCA CONDULET BODIES—Black Enamel Finish

Size in inches	1/2	3/4	1
Catalogue Number	50 140 lbs.	FSCA222 30 90 lbs. \$1.25	FSCA333 20 70 lbs. \$1.45

#### TYPE FSCT CONDULET BODIES—Black Enamel Pinish

Size in inches	1/2	3/4	1
Catalogue Number	50 140 lbs.	FSCT222 30 90 lbs. \$1.25	FSCT333 20 70 lbs. \$1.45

Covers for above Condulet bodies are listed on pages 46 and 47. We will furnish switches or receptacles for above Condulets bodies, and enumerate them on page 41. For finishes and assortments, see note on opposite page. Gasket is listed on page 176. Condulet reducers are listed on page 171.

Listings of the PS series of Condulet bodies are continued on page 41.

#### CONDULET BODIES-FS SERIES, SHALLOW TYPE-Continued

#### TYPES FST AND FSX

For Single Push Button, Double Push Button or Flush Rotary Switches (Shallow);
Flush Plug Receptacles (Shallow), and Porcelain or Metal Covers

Over-all Dimensions of Body, Exclusive of Hubs: Length, 4 9-32 Inches; Width, 2 3-4 Inches; Depth, 1 7-8 Inches. Furnished with Fastening Screws for Fittings

#### TYPE FST CONDULET BODIES-Black Enamel Finish



Size in inches	1/2	3/4	1
Catalogue Number	50	FST222 30 90 lbs. \$1.25	FST333 20 70 lbs. \$1.45

#### TYPE FSX CONDULET BODIES-Black Enamel Finish



Size in inches	1/2	3/4	.1
Catalogue Number	50	FSX2222 30 100 lbs. \$1.50	FSX3333 20 75 lbs. \$1.70

Important Information Concerning Condulet Bodies Listed on Pages 39, 40 and 41

We will furnish fittings for the FS series of Condulet bodies, and switches and receptacles suitable for them are as follows:

Single Push Button Switches: PERKINS—2457, 2458, 2459, 2460, 2461, 2462, 2491, 2492, 2493, 2494.

Double Push Button Switches: ARROW E-6500, 6501, 6502, 6503. DIAMOND H-050, 060, 070, 080. G. E. CO.—68247, 68248, 68249, 68250. HART & HEGEMAN-2081, 2082, 2083, 2084. CUTTER-"S-F." MA-CHEN & MAYER-2000, 2001, 2002, 2003, KNOWLES-2971, 2972, 2973, 2974. PERKINS-2201, 2202, 2203, 2204. CUTLER-HAMMER CO.—7201, 7202, 7203.

Double Push Button Lock Switches: ARROW E-6504, 6505, 6506, 6507. DIAMOND H-055, 065, 075, 085. G. E. CO.—GE688, GE689, GE690, GE691. HART & HEGEMAN-2081, 2082, 2083, 2084. MACHEN & MAYER-2004, 2005, 2006, 2007, 2008. KNOWLES-12971, 12972, 12973, 12974. PERKINS-2295, 2296, 2297, 2298.

Double Push Button, Removable Mechanism, Switches: G. E. CO.—GE731, GE732, GE733. PERKINS—2519, 2520, 2521, 2522, 2523, 2524.

Double Push Button, Removable Mechanism, Lock Switches: G. E. CO.—GE684, GE685, GE686. PERKINS—2519, 2520, 2521, 2525, 2526, 2527.

Flush Rotary Switches: ARROW E—6250, 6251, 6252, 6253, 6254, 6255, 6256, 6257. DIAMOND H—0105, 0110, 0120, 0130, 0140, 0150, 0160. G. E. CO.—60468, 60469, 60470, 60473, 60475, 60476, 60477, 60478, 60479, 60480. HART & HEGEMAN—600, 601, 602, 603, 604, 2263. PERKINS—2205, 2206, 2207, 2208, 2209, 2210, 2224, 2325.

Flush Plug Receptacles: ARROW E-1064. MACHEN & MAYER-2042, 4355. PERKINS-281, 1363, 1708. HUBBELL-5547, 5552, 5579. TRUMBULL-1005, 1008. G. B. CO.-36817.

Removable Flush Wall Receptacles: G. E. CO.—GE692. PERKINS—2520, 2528.

Double Door Flush Receptacle: G. E. CO.—GE287.

Proper fastening screws are furnished with covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, see page 182. For cast brass and cast bronze Condulet bodies, plain and with special finishes, see page 182. For aluminum Condulet bodies, plain and with black enamel finish, see page 182.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Covers for above Condulet bodies are listed on pages 46 and 47. Gasket is listed on page 176. Condulet reducers are listed on page 171.

#### CONDULET BODIES-TWO-GANG FS SERIES-SHALLOW TYPE

## TWO-GANG TYPES FS, FSC AND FSD

For Single Push Button, Double Push Button or Flush Rotary Switches (Shallow), and Blank Metal Covers

Over-all Dimensions of Body, Exclusive of Hubs: Length, 45-8 Inches; Width, 49-32 Inches; Depth, 17-8 Inches. Furnished with Fastening Screws for Fittings



Two-Gang Type FS with Cover for Single Push Button Switches



Two-Gang Type FSD with Blank Metal Cover



Two-Gang Type FS with Cover for Flush Rotary Switches (Broken-away View, Showing Switches Mounted)



Two-Gang Type FS with Cover for Flush Rotary Switches



Two-Gang Type FSC with Cover for Double Push Button Switches



#### TWO-GANG TYPE FS CONDULET BODIES-Black Enamel Finish

Size in inches	½ in. main	3/4 in. main	1 in. main
Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	50 140 lbs.	FS22 25 90 lbs. \$1.30	FS32 15 50 lbs. \$1.40



#### TWO-GANG TYPE FSC CONDULET BODIES-Black Enamel Finish

Size in inches	½ in. mains	¾ in. mains	1 in. mains
Catalogue Number Standard Package Shipping Weight Std. Pkg	50	FSC222 25 100 lbs.	FSC332 15 60 lbs.
List Price, each	\$1.30	\$1.40	\$1.55



#### TWO-GANG TYPE FSD CONDULET BODIES-Black Enamel Finish

Size in inches	½ in. main ½ in. branches	3/4 in. main 1/2 in. branches	1 in. main
Catalogue Number Standard Package		FSD2112 25	FSD3112 15
Shipping Weight Std. Pkg List Price, each	160 lbs.	110 lbs. \$1.55	70 lbs. \$1.65

Covers for above Condulet bodies are listed on page 48. We will furnish switches for above Condulet bodies, and enumerate them on page 41. For finishes and assortments, see note on page 45. Condulet reducers are listed on page 171.

#### CONDULET BODIES-THREE-GANG FS SERIES-SHALLOW TYPE

## THREE-GANG TYPES FS, FSC AND FSD

For Single Push Button, Double Push Button or Flush Rotary Switches (Shallow); Bryant Heater Control Combination 398 (less Plate), and Blank Metal Covers

Over-all Dimensions of Body, Exclusive of Hubs: Length, 61-2 Inches; Width, 49-32 Inches; Depth, 17-8 Inches. Furnished with Fastening Screws for Fittings



Three-Gang Type FS with Crouse-Hinds Cover for Bryant Heater Control Combination 398



Three-Gang Type FS with Cover for Single Push Button Switches (Broken-away View, Showing Switches Mounted)



Three-Gang Type FS with Cover for Single Push Button Switches



Three-Gang Type FSD with Cover for Double Push Button Switches



# THREE-GANG TYPE FS CONDULET BODIES Black Enamel Finish

Size in inches	½ in. main	in. main	1 in. main
Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	Not Practical	FS23 20 110 lbs. \$1.80	FS33 10 60 lbs. \$1.95



## THREE-GANG TYPE FSC CONDULET BODIES Black Enamel Finish

Size in inches	½ in. mains	in. mains	1 in. mains
Catalogue Number	Not	FSC223	FSC333
Standard Package		20	10
Ship. Wt. Std. Pkg		115 lbs.	65 lbs.
List Price, each		\$1.90	\$2.05



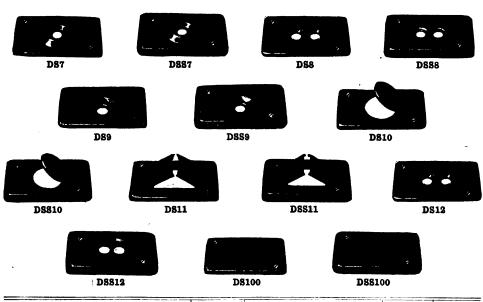
## THREE-GANG TYPE FSD CONDULET BODIES Black Enamel Finish

Size in inches	$\frac{1}{2}$ in. main $\frac{1}{2}$ in. branches	<ul> <li>in. main</li> <li>in. branches</li> </ul>	1 in. main in line in. branches
Catalogue Number			FSD31113
Standard Package Ship. Wt. Std. Pkg List Price, each	190 lbs.	20 120 lbs. \$2.15	10 65 lbs. \$2.30

Covers for above Condulet bodies are listed on page 48. We will furnish switches or Bryant heater control combination for above Condulet bodies, and enumerate switches on page 41. For finishes and assortments, see note on page 45. Condulet reducers are listed on page 171

#### **COVERS**

# For FD and FS Series of Condulet Bodies Furnished with Fastening Screws



Style of Cover	Surface Type	Flush Type	Style of Cover	Surface Type	Flush Type
Standard Package	75	75	Standard Package	75	75

# COVERS FOR SWITCHES AND PLUG RECEPTACLES, AND BLANK METAL COVERS Black Enamel Finish

For Single Push Button Switch	Cat. No List, ea		DSS7 \$ .10	For Rectangular Plug Receptacle	Cat. No List, ea		DSS11 \$ .80
For Double Push Button Switch	Cat. No List, ea		DSS8 \$ .10	For Hubbell Polarity Plug Receptacle 5552	Cat. No List, ea		DSS12 \$ .20
For Flush Rotary Switch	Cat. No List, ea		DSS9 \$ .10	Blank Metal	Cat. No List, ea		DSS100 \$ .10
For Round Plug Receptacle	Cat. No List, ea		DSS10 \$ .60	Cast Iron	Cat. No List, ea	DS100g \$ .25	DSS100g \$ .25
Shipping Weigh	t Std. Pkg.	30 lbs.	35 lbs.	Shipping Weigh	t Std. Pkg.	35 lbs.	40 lbs.

#### Important Information Concerning Covers Listed on This and the Opposite Page

Proper fastening screws are furnished with covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for metal covers, and will be furnished unless another finish is specified on the order. Galvanized finish will be furnished, if specifically ordered, at the same price as black enamel finish. For special plated finishes, see page 182.

For brass and bronze covers, plain and with special finishes, see page 182.

White enamel finish will be furnished on metal covers, if specifically ordered, at 50% increase over list price of black enamel finish.

All black enameled, galvanized and porcelain covers, listed on this and the opposite page, may be assorted to make up a standard package.

Condulet bodies that take above covers are listed on pages 35, 36, 37, 39, 40, 41 and 55.

Listings of covers are continued on page 47.

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#### **COVERS**

#### FOR FD AND FS SERIES OF CONDULET BODIES

Furnished with Fastening Screws

#### COVERS FOR FLUSH PLUG RECEPTACLES

	CO	VERS FO	K LLUSH	PLUG KI	CEPIACI	ÆS	
Black Enameled	Surface Type	Flush Type	Style o	f Cover	Surface Type	Flush Type	Black Enameled
Enameled	75	75	Standard	Package	75	75	Enamelea
		bell "Duple Receptacle	x'' Flush 6257	For Hubbell Flush Plug Receptacle 5547, 5802 or 6051*			
	DS13 30 lbs. \$ .30	DSS13 35 lbs. \$ .30		e Number Std. Pkg. ce, each .	DS21 30 lbs. \$ .25	DSS21 35 lbs. \$ .25	
			For Hubbe	ll Flush Plu	g Receptac	le 5566	
	Catalogue Ship. Wt. List Price	e Number Std. Pkg. e, each	DS22 30 lbs. \$ .40	DSS22 35 lbs. \$ .40			and FS series are 5 to 41, inclusive.

#### GANG COVERS

#### FOR TWO-GANG FS SERIES OF CONDULET BODIES

Furnished with Fastening Screws

#### COVERS FOR FLUSH SWITCHES AND PLUG RECEPTACLES

`	CVERS	OK FLUS	H SWIIC	nes and	PLUG K	ECEPIAC	LEG	
Black Enameled	Surface Type	Flush Type	Style o	f Cover	Surface Type	Flush Type	Black Enameled	
Mamered	50	50	Standard	l Package	50	50	1 manieren	
	For Round Flush Plug Receptacles			For Rec	tangular F Receptacles	ush Plug	[DD]	
	\$102 \$1.20	SS102 \$1.20		e Number ce, each .	\$112 \$1.60	SS112 \$1.60		
		bbell Polar eceptacle 55		For E	Iubbell "Du eceptacle 62	iplex''		
	S122 \$ .50	SS122 \$ .50		e Number ce, each .	\$132 \$ .60	SS132 \$ .60		
	For Hubbell Flush Plug Receptacle 5547, 5802 or 6051*			For Hubbell Flush Plug Receptacle 5566				
	S212 \$ .50	SS212 \$ .50		e Number ce, each .	\$222 \$ .80	\$S222 \$ .80		
	For Single Push Switch and Round Flush Plug Receptacles			For Single Push Switch and Rectangular Flush Plug Recept.				
	\$7102 \$ .80	SS7102 \$ .80		e Number .ce, each .	\$7112 \$1.20	\$87112 \$1.20	[ 6 P]	
	For Sing Hubbell Po	le Push Swolarity Rece	itch and ptacle 5552	For Single Push Switch and Hubbell "Duplex" Recept. 6257				
	\$7122 \$ .50	SS7122 \$ .50	Catalogue . List Pri	e Number ce, each	S7132 \$ .50	SS7132 \$ .50		
	For Sing Hubbell Re	le Push Sw cept.5547.58	itch and 302 or 6051*	For Single Push Switch and Hubbell Plug Receptacle 5566			· (3)	
	\$7212 \$ .50	\$87212 \$ .50	Catalogue . List Pri		\$7222 \$ .50	SS7222 \$ .50		

#### GANG COVERS—Continued

#### FOR TWO-GANG FS SERIES OF CONDULET BODIES

Furnished with Fastening Screws

COVERS	FOR FL	USH SWI	TCHES A	ND PLUG	RECEPT	ACLES—C	ontinued	
Black	Surface Type	Flush Type	Style of	f Cover	Surface Type	Flush Type	Black Enameled	
Enameled	50	50	Standard	Package	50	50	Enameled	
	For Double Flush	Push Switch Plug Recep	and Round stacle	For Double Push Switch and I tangular Flush Plug Recepts		ch and Rec- Receptacle	ြေ	
60	\$8102 \$ .80	\$S8102 \$ .80		e Number ce, each	\$8112 \$1.20	\$88112 \$1.20	ि छ	
	For Double Push Switch and Hub- bell Polarity Receptacle 5552 For Double Push Switch and Hub- bell "Duplex" Receptacle 6257						[• Q]	
[0,0]	\$8122 \$ .50	SS8122 \$ .50	Catalogue . List Pri		\$8132 \$ .50	SS8132 \$ .50	60	
	For Double Switch and Hubbell Receptacle 5547, 5802 or 6051* For Double Switch and Hubbell Plug Receptacle 5566							
	\$8212 \$ .50	SS8212 \$ .50		ne Number   S8222   SS8222 rice, each   \$ .50   \$ .50				
	For Rota	Flush Plug Receptacle 1 9102 SS9102 Catalogue Num			Switchand l	Rectangular ptacle		
	\$9102 \$ .80				S9112 \$1.20	\$S9112 \$1.20	(a)	
	For Rotary Switch and Hubbell Polarity Receptacle 5552 For Rotary Switch and Hubbell 'Duplex' Receptacle 6257							
	S9122 \$ .50	SS9122 \$ .50		e Number ce, each	\$9132 \$ .50	\$89132 \$ .50		
	For Rotary Switch and Hubbell Receptacle 5547, 5802 or 6051*  For Rotary Switch and Hubbell Plug Receptacle 5566				nd Hubbell 5566			
	\$9212 \$ .50	\$S9212 \$ .50		e Number ce, each .	\$9222 \$ .50	\$S9222 \$ .50	@3	
00	For Hubbe one of	ll Receptacl 5547, 5802 o	es 6257 and or 6051*	For Hubbell "Duplex" Receptacles 6257 and 5566				
	\$13212 \$ .50	\$S13212 \$ .50	Catalogue . List Pri	e Number ce, each	\$13222 \$ .50	SS13222 \$ .50		
	For Hubbe one of	ll Receptacl 5547, 5802 o	es 5566 and r 6051*	For Roung	d Plug Rece ular Plug R			
	\$21222 \$ .50	SS21222 \$ .50	Catalogue . List Pri	e Number ce, each .	\$10112 \$1.75	\$S10112 \$1.75		
	For Hubbe	ll Polarity R of 5547, 5802	ecept. 5552 2 or 6051*	For Hubbe	ell Polarity F ubbell Rece	Recept, 5552 pt. 5566		
	\$12212 \$ .50	SS12212 \$ .50		e Number ce, each .	\$12222 \$ .50	SS12222 \$ .50		

\*Or Bryant "Spartan" receptacle No. 120.
Two-gang F8 series of Condulets are listed on page 42.
Finishes: Black enamel is the standard finish for metal covers, and will be furnished unless another finish is specified on the order. Galvanized finish will be furnished, if specifically ordered, at the same price as black enamel finish. For special metals and finishes, see page

White enamel finish will be furnished on metal covers, if specifically ordered, at 50% increase

over list price of black enamel finish.

All black enameled and galvanized covers for Condulet bodies of the FD and FS series may be assorted to make up a standard package, also all black enameled and galvanized covers for two-gang FS series of Condulet bodies. Digitized by **GOO** 

#### GANG COVERS

For Two and Three-Gang Types FS, FSC and FSD Condulet Bodies Furnished with Fastening Screws









COVERS FOR TWO-GANG CONDULET BODIES—Black Enamel Finish

Style of C	over	Surface Type	Flush Type	Style of Cover		Surface Type	Flush Type
Standard Packa	ge	50	50	Standard Package		50	50
For Single Push Button Switches	Cat. No List, ca	S72 \$ .20	SS72 \$ .20	For Flush Rotary Switches	Cat. No List, ea	S92 \$ .20	SS92 \$ .20
For Double Push Button Switches	Cat. No List, ca		SS82 \$ .20	Blank Metal	Cat. No List, ea		SS1002 \$ .20
Shipping Weigh	t Std. Pkg.	30 lbs.	35 lbs.	Shipping Weigh	t Std. Pkg.	30 lbs.	35 lbs.

Condulet bodies that take Two-Gang covers are listed on page 42.



#### COVERS FOR THREE-GANG CONDULET BODIES—Black Enamel Finish

Style of C	Cover	Surface Type	Flush Type	Style of Cover		Surface Type	Flush Type
Standard Packs	ъgе	35	35	Standard Package		35	35
For Single Push Button Switches	Cat. No List, ea		SS73 \$ .40	Crouse-Hinds Cover for Bryant Heater Control Cat. No			SS7113
For Double Push Button Switches	Cat. No List, ea	S83 \$ .40	SS83 \$ .40	Combination 398 less Bryant Plate	List, ea	\$1.45	\$1.45
For Flush Rotary Switches	Cat. No List ea	S93 \$ .40	SS93 \$ .40	Blank Metal	Cat. No List, ea		SS1003 \$ .40
Shipping Weigh	t Std. Pkg.	30 lbs.	35 lbs.	Shipping Weight Std. Pkg.		40 lbs.	45 lbs.

Condulet bodies that take Three-Gang covers are listed on page 43.

#### Important Information Concerning Covers Listed on This Page

Proper fastening screws are furnished with covers, and are so held in screw holes that they can

not fall out.

Finishes: Black enamel is the standard finish for metal covers, and will be furnished unless.

Calvanized finish will be furnished if specifically another finish is specified on the order. Galvanized finish will be furnished, if specifically ordered, at same price as black enamel finish. For special plated finishes, see page 182. For brass and bronze covers, plain and with special finishes, see page 182. White enamel finish will be furnished on metal covers, if specifically ordered, at 50% increase

over list price of black enamel finish.

All black enameled and galvanized covers for Two-Gang FS series Condulet bodies may be assorted to make up a standard package.

All black enameled and galvanized covers for Three-Gang FS series Condulet bodies may be assorted to make up a standard package. Digitized by GOOGIC

#### CONDULETS

#### TYPE FF—SERVICE ENTRANCE

Fused and Weather-Proof-For 250 Volt Cartridge or 125 Volt Plug Fuse Cut-outs Furnished with Universal Cut-out Fastening Plate, Porcelain Bushings and all necessary Bolts and Screws, but without Cut-out

#### For 30 Ampere, 250 Volt Cartridge or 125 Volt Plug Fuse, N. E. C. Main Line Cut-outs-Cut-outs not Furnished

	Style of Cut-out	Size in inches	1/2	3/4	1
	2-wire or 3-wire	Catalogue Number Standard Package Weight Std. Pkg. List Price, each	20 200 lbs.	FF23022 20 230 lbs. \$4.00	FF33022 10 140 lbs. \$4.10
	Style of Cut-out	Size in inches	3/4	1	11/4
Padlock is not included in list prices	4-wire	Catalogue Number Standard Package Weight Std. Pkg List Price, each	20 280 lbs.	FF33042 10 180 lbs. \$4.90	FF43042 10 195 lbs. \$5.10

#### For 60 Ampere, 250 Volt, N. B. C. Main Line Cut-outs—Cut-outs not Furnished

Style of Cut-out		11/4	Size in inches	Style of Cut-out	1	11/4	
2-wire or	10 170 lbs	FF46022 10 185 lbs. \$5.10	Cat. No Std. Pkg Wt. Std. Pkg List, each	4-wire	FF36042 10 195 lbs. \$6.85	FF46042 10 210 lbs. \$7.00	

#### For 100 Ampere, 250 Volt, N. E. C. Main Line Cut-outs-Cut-outs not Furnished

Style of Cut-out		11/2	2	Size in inches	Style of Cut-out	11/4	11/2	2
2-wire or 3-wire	10 250 lbg	5 145 lbs.		Cat. No Std. Pkg .Wt. Std. Pkg. List, each	4-wire	FF410042 10 300 lbs. \$12.10	FF510042 5 175 lbs. \$12.30	FF610042 5 170 lbs. \$12.50

We will furnish cut-outs for above Condulets, and the universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs:

#### 30 Ampere, 250 Volt, Cartridge and 125 Volt, Plug Fuse Cut-outs

30 Ampere, 200 Volt, Cartridge and 125 Volt, Fing Fuse Cut-outs

2-Wire: BRYANT—(Cartridge) 1917, (Plug) 62965. D. & W.—(Cartridge) 91102. G. E. CO.—(Cartridge) 34367, (Plug) 62965. NOARK—(Cartridge) 3327. PAISTE—(Cartridge) 72905, (Plug) 2995. SHAWMUT—(Cartridge) 2077. TRUMBULL—(Cartridge) 29653, (Plug) 2965. WEBER—(Plug) 62965. UNION—(Cartridge) 2010.

Wire: BRYANT—(Cartridge) 1924, (Plug) 62165. D. & W.—(Cartridge) 91103. G. E. CO.—(Cartridge) 3430.

(Plug) 62165. NOARK—(Cartridge) 3328. PAISTE—(Cartridge) 72165, (Plug) 2165. SHAWMUT—(Cartridge) 2012.

(Cartridge) 20179. TRUMBULL—(Cartridge) 21653, (Plug) 2165. WEBER—(Plug) 62165. UNION—(Cartridge) 2012.

4-Wire: Mount two 2-wire cut-outs side by side.

#### 60 Ampere, 250 Volt, Cut-outs

Cartridge) 3329. PAISTE—(Cartridge) 82965. SHAWMUT—(Cartridge) 2078. TRUMBULL—(Cartridge) 29656. UNION—(Cartridge) 1925. D. & W.—(Cartridge) 91109. G. R. CO.—(Cartridge) 34376. NOARK—(Cartridge) 2011.

3-Wire: BRYANT—(Cartridge) 1925. D. & W.—(Cartridge) 91109. G. R. CO.—(Cartridge) 34377. NOARK—(Cartridge) 3330. PAISTE—(Cartridge) 82165. SHAWMUT—(Cartridge) 2080. TRUMBULL—(Cartridge) 21656. UNION—(Cartridge) 2013.

4-Wire: Mount two 2-wire cut-outs side by side.

#### 100 Ampere, 250 Volt, Cut-outs

2-Wire: BRYANT—(Cartridge) 271. D. & W.—(Cartridge) 91119. G. B. CO.—(Cartridge) 36801. NOARK—
(Cartridge) 3331. SHAWMUT—(Cartridge) 2101. UNION—(Cartridge) 2014.

3-Wire: BRYANT—(Cartridge) 272. D. & W.—(Cartridge) 91120. G. B. CO.—(Cartridge) 36800. NOARK—
(Cartridge) 3322. SHAWMUT—(Cartridge) 2102. UNION—(Cartridge) 2015.

4-Wire: Mount two 2-wire cut-outs side by side.

Padlock is not included in prices for Condulets.

For finishes and assortments, see note on page 57.

Condulet reducers are listed on page 171.

Condulets of the FF series are continued on page 52.

(Cross Reference Page 51) Digitized by Google

#### CONDULETS-FOR CONTROL OF HEATING DEVICES

#### TYPE-FH

#### TYPE—FHF

Furnished with Crouse-Hinds Receptacle C337G, Adjustable Bar for Round Base Switch or Plug Receptacle and all necessary Fastening Screws Furnished with Pilot Lamp Receptacle, Universal Cut-out Fastening Plate, Adapting Rings and Adjustable Bars for Switch and Attachment Plug Receptacle, Jewel in Cover and all necessary Bolts and Screws



Type FH
Showing Snap Switch, Flush Plug Receptacle,
Cover DS10, Crouse-Hinds Receptacle C337G
with Guard and Incandescent
Lamp Mounted



Type FHF Showing Snap Switch, Cut-out, Incandescent Lamp and Attachment Plug Receptacle Mounted (Broken-away View)

## TYPE FH CONDULETS-Black Enamel Finish

		Size in inches	1/2	3/4	1
1	Form 10	Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	15 95 lbs.	FH210 15 100 lbs. \$2.60	FH310 10 75 lbs. \$2.70
		Size in inches	1/2	3/4	1
EL MI	Form 20	Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	15 120 lbs.	FH220 15 125 lbs. \$3.10	FH320 10 90 lbs. \$3.20

#### TYPE FHF CONDULETS-Black Enamel Finish



Size in inches	1/2	3/4
Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	15 130 lbs.	FHF220 15 130 lbs. \$4.75

Important Information Concerning Condulets Listed on This Page.

The adjustable bars and adapting rings furnished with each Condulet permit the proper mounting of any switch or Form 5 or Form 10, (or in case of type FHF Condulet, any Form 20) attachment plug receptacle enumerated on page 62 or 63.

The universal cut-out fastening plate, furnished with each type FHF Condulet, takes any of the following 2-wire, 30 ampere, 250 volt cartridge, or 2-wire, 30 ampere, 125 volt, plug fuse cut-outs:

BRYANT—(Cartridge) 1917, (Plug) 62965. D. & W.—(Cartridge) 91102. G. E. CO.—(Cartridge) 34367, (Plug) 62965. NOARK—(Cartridge) 3327. PAISTE—(Cartridge) 72965, (Plug) 2965. SHAWMUT—(Cartridge) 2077. TRUMBULL—(Cartridge) 29653, (Plug) 2965. WEBER—(Plug) 62965. UNION—(Cartridge) 2010.

Type FHF Condulets are designed to take style H (bulb 89) lamp.

Type FH Condulet bodies take covers DS7, DS8, DS9, DS10, DS11 and DS12, listed on page 46. Receptacle C337G is listed separately on page 190. Condulet reducers are listed on page 171.

For finishes and assortments, see note on page 57.

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## CONDULET BODIES-G AND H SERIES TYPES G AND GA

Take Round Covers; 5, 10 or 20 Ampere Round Base Switches, or Round Base Fittings

Furnished with Adjustable Bar and all necessary Fastening Screws



Type G Showing Snap Switch Mounted (Broken-away View Illustrating use of Adjustable Bar in Fastening Fitting or Cover to a Condulet Body of the G and H Series)

Condulet bodies of the G and H series are so designed that covers, switches or fittings are fastened to them by means of an adjustable bar and two screws. The adjustable bar permits switch or fitting to be mounted in any desired position.

A gasket may be used between cover or fitting and Condulet body.

Gaskets are not furnished with Condulet bodies. and if desired must be ordered separately.

Form 5, Form 10 and Form 20 are designations to indicate sizes of Condulet bodies which take fittings correspondingly classified on pages 62 and 63. The dimensions of these Condulet bodies are scheduled on page 56.







Size	TYI	E G BOI	DIES	Black Enamel	Size	TYP	E GA BOI	DIES
Size	Form 5	Form 10	Form 20	Finish	Size	Form 5	Form 10	Form 20
1/2- inch	G151 100 110 lbs. \$ .55	G1101 75 90 lbs. \$ .65	G1201 50 75 lbs. \$ .90	Catalogue Number. Standard Package Ship. Wt. Std. Pkg List Price, each	1/2- inch	GA151 100 120 lbs. \$ .75	GA1101 75 100 lbs. \$ .85	GA1201 50 80 lbs. \$1.10
3/4- inch	G252 50 75 lbs. \$ .65	G2102 25 55 lbs. \$ .80	G2202 25 60 lbs. \$ .95	. Catalogue Number. Standard Package. .Ship. Wt. Std. Pkg. List Price, each	3/4- inch	GA252 50 80 lbs. \$ .85	GA2102 25 60 lbs. \$1.00	GA2202 25 65 lbs. \$1.20
1- inch	G353 25 60 lbs. \$ .90	G3103 25 65 lbs. \$1.00	G3203 25 70 lbs. \$1.20	. Catalogue NumberStandard PackageShip. Wt. Std. PkgList Price, each	1- inch	GA353 25 65 lbs. \$1.10	GA3103 25 70 lbs. \$1.20	GA3203 25 75 lbs. \$1.50

Important Information Concerning Condulet Bodies Listed on This Page

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, see page 182. For cast brass and cast bronze Condulet bodies, plain and with special finishes, see page 182. For aluminum Condulet bodies, plain and with black enamel finish, see page 182.

Black enameled and galvanized Condulet bodies of the same type, size and form may be assorted to make up a standard package. No other assortment is allowed.

We will furnish switches or fittings for above Condulet bodies, and enumerate them on pages 62 and

Gaskets are listed on page 176. Condulet reducers are listed on page 171.

Covers for Condulet bodies of the G and H series are listed on page 61.

Condulet bodies of the G and H series are listed on pages 57 to 60, inclusive.

## CONDULET BODIES-G AND H SERIES-Continued TYPES GL, GLA, GT AND GTA

Take Round Covers; 5, 10 or 20 Ampere Round Base Switches, or Round Base Fittings

Furnished with Adjustable Bar and all necessary Fastening Screws





		Type GL			1		туре Сы		
Size	TYP	E GL BO	DIES		Enamel	Size	TYPE	GLA BO	DIES
DIEC	Form 5	Form 10	Form 20	Fin	ish	Dize	Form 5	Form 10	Form 20
1/2- inch	GL151 100 110 lbs. \$ .60	GL1101 75 100 lbs. \$ .70	GL1201 50 80 lbs. \$ .95	Standard . Weight	gue No Package. Std. Pkg. ice, each	1/2-	GLA151 100 130 lbs. \$ .75	GLA 1101 75 110 lbs. \$ .85	50 90 lbs. \$1.10
3/4- inch	GL252 50 75 lbs. \$ .70	GL2102 25 55 lbs. \$ .85	GL2202 25 60 lbs. \$1.05	. Weight	gue No Package. Std. Pkg. ce, each	3/4- inch	GLA252 50 95 lbs. \$ .85	GLA 2102 25 60 lbs. \$1.00	25 65 lbs. \$1.20
1- inch	GL353 25 60 lbs. \$ .95	GL3103 25 65 lbs. \$1.05	GL3203 25 75 lbs. \$1.35	.Standard . Weight	gue No Package. Std. Pkg. ice, each	1- inch	GLA353 25 60 lbs. \$1.10	GLA 3103 25 65 lbs. \$1.20	GLA 3203 25 60 lbs. \$1.50



Type GT



				<del></del>				
Size	TYP	E GT BO	DIES	Black Enamel	Size	TYPE	GTA BO	DIES
Mac	Form 5	Form 10	Form 20	Finish	Dizz	Form 5	Form 10	Form 20
1/2- inch	GT151 100 110 lbs	GT1101 75 100 lbs. \$ .85	GT1201 50 80 lbs. \$1.10	Catalogue No Standard Package. .Weight Std. Pkg. List Price, each	1/2- inch	GTA151 100 160 lbs. \$90	GTA1101 75 120 lbs. \$1.00	50 100 lbs. \$1.25
3/4- inch	GT252 50 75 lbs. \$ .85	GT2102 25 55 lbs. \$1.00	60 lbs.	Catalogue No Standard Package. Weight Std. Pkg. List Price, each	3/4- inch	GTA252 50 100 lbs. \$1.00	25 60 lbs. \$1.15	GTA2202   25   65 lbs.   \$1.40
1- inch	GT353 25 60 lbs. \$1.10	GT3103 25 65 lbs. \$1.20	GT3203 25 75 lbs. \$1.50	Catalogue No Standard Package. Weight Std. Pkg. List Price, each	1- inch	GTA353 25 60 lbs. \$1.35	GTA3103 25 65 lbs. \$1.45	GTA3203 25 75 lbs. \$1.80

Form 5, Form 10 and Form 20 are designations to indicate sizes of Condulet bodies which take fittings correspondingly classified on pages 62 and 63. The dimensions of these Condulet Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, see page 182. For cast brass and cast bronze Condulet bodies, plain and with special finishes, see page 182. For aluminum Condulet bodies, plain and with black enamel finish, see page 182. Black enameled and galvanized Condulet bodies of the same type, size and form may be

assorted to make up a standard package. No other assortment is allowed.

We will furnish switches or fittings for above Condulet bodies, and enumerate them on pages 62 and 63.

Gaskets are listed on page 176. Condulet reducers are listed on page 171. Covers for Condulet bodies of the G and H series are listed on page 61. Condulet bodies of the G and H series are listed on pages 57 to 60, inclusive.

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## CONDULET BODIES-G AND H SERIES-Continued TYPES GX, GXA, H AND HA

Take Round Covers; 5, 10 or 20 Ampere Round Base Switches, or Round Base Fittings

Furnished with Adjustable Bar and all necessary Fastening Screws



Type GX



Size	TYP	E GX BO	DIES	Black Enamel	Size	TYPE GXA BODIES		
DIZE	Form 5	Form 10	Form 20	Finish	Dize	Form 5	Form 10	Form 20
1/2- inch	GX151 100 130 lbs. \$ .90	GX1101 75 120 lbs. \$1.00	GX1201 50 100 lbs. \$1.25	Catalogue No Standard Pkg Ship. Wt. Std. Pkg. List Price, each	1/2- inch	GXA151 100 180 lbs. \$1.05	GXA1101 75 150 lbs. \$1.15	GXA1201 50 110 lbs. \$1.40
3/4- inch	GX252 50 85 lbs. \$1.00	GX2102 25 70 lbs. \$1.15	GX2202 25 80 lbs. \$1.40	Catalogue No Standard Pkg Ship. Wt. Std. Pkg. List Price, each	3/4-	GXA252 50 110 lbs. \$1.15	25 75 lbs.	GXA2202 25 80 lbs. \$1.60
1- inch	GX353 25 70 lbs. \$1.35	GX3103 25 80 lbs. \$1.45	GX3203 25 95 lbs. \$1.80	Catalogue No Standard Pkg Ship. Wt. Std. Pkg. List Price, each	1-	GXA353 25 75 lbs. \$1.55	25	GXA3203 25 85 lbs. \$2.00



Type H



Type HA

Size	TYF	E H BOI	DIES	Black Enamel	Size	TYP	TYPE HA BODIES		
Dize	Form 5	Form 10	Form 20	Finish	Dize	Form 5	Form 10	Form 20	
1/2- inch	H15 100 100 lbs. \$ .45	H110 75 85 lbs. \$ .55	H120 50 80 lbs. \$ .80	Catalogue No Standard Pkg Ship. Wt. Std. Pkg. List Price, each	1/2- inch	HA15 100 110 lbs. \$ .50	HA110 75 95 lbs. \$ .60	HA120 50 95 lbs. \$ .85	
3/4- inch	H25 50 70 lbs. \$ .55	H210 25 50 lbs. \$ .70	H220 25 60 lbs. \$ .85	Catalogue No Standard Pkg Ship. Wt. Std. Pkg. List Price, each	3/4- inch	HA25 50 80 lbs. \$ .60	HA210 25 60 lbs. \$ .75	HA220 25 65 lbs. \$ .90	
1- inch	H35 25 50 lbs. \$ .80	H310 25 60 lbs. \$ .90	H320 25 70 lbs. \$1.10	Catalogue No Standard Pkg Ship. Wt. Std. Pkg. List Price, each	1- inch	HA35 25 60 lbs. \$ .85	HA310 25 65 lbs. \$ .95	HA320 25 75 lbs. \$1.20	

Form 5, Form 10 and Form 20 are designations to indicate sizes of Condulet bodies which take fittings correspondingly classified on pages 62 and 63. The dimensions of these Condulet Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, see page 182. For cast brass and cast bronze Condulet bodies, plain and with special finishes, see page 182. For aluminum Condulet bodies, plain and with black enamel finish, see page 182. Black enameled and galvanized Condulet bodies of the same type, size and form may be assorted

to make up a standard package. No other assortment is allowed.

We will furnish switches or fittings for above Condulet bodies, and enumerate them on pages 62 and 63.

Gaskets are listed on page 176. Condulet reducers are listed on page 171. Covers for Condulet bodies of the G and H series are listed on page 61. Condulet bodies of the G and H series are listed on pages 57 to 60, inclusive.

## CONDULET BODIES-G AND H SERIES-Continued TYPES HH, HHC, HLA AND GXB

Take Round Covers; 5, 10 or 20 Ampere Round Base Switches, or Round Base Fittings-Except Type GXB which is made in Form 10 Only Furnished with Adjustable Bar and all necessary Fastening Screws





Size	TYPI	Е НН ВО		Black Enamel	Size	TYPE	ннс вс	DIES
<b>DID</b> O	Form 5	Form 10	Form 20	Pinish	Dize	Form 5	Form 10	Form 20
1/ <sub>2</sub> - inch	HH151 100 130 lbs. \$ .55	HH1101 75 110 lbs. \$ .65	HH1201 50 100 lbs. \$ .90	Catalogue No Standard Pkg Ship. Wt. Std. Pkg. List Price, each	1/2-	HHC151 100 160 lbs. \$ .75	HHC1101 75 140 lbs. \$ .85	HHC1201 50 110 lbs. \$1.10
3/4- inch	HH252 50 95 lbs. \$ .65	HH2102 25 65 lbs. \$ .80	HH2202 25 75 lbs. \$ .95	Catalogue No Standard Pkg Ship. Wt. Std. Pkg. List Price', each	3/4-	HHC252 50 100 lbs. \$ .85	HHC2102 25 70 lbs. \$1.00	HHC2202 25 85 lbs. \$1.20
1- inch	HH353 25 65 lbs. \$ .90	HH3103 25 70 lbs. \$1.00	25	Catalogue No Standard Pkg Ship. Wt. Std. Pkg. List Price, each	l- inch	HHC353 25 75 lbs. \$1.10	HHC3103 25 80 lbs. \$1.20	HHC3203 25 90 lbs. \$1.50



Type HLA



Type GXB

Size	TYPE	HLA BO	DIES	Black Enamel	1	TYPE GY	B BODIE	S
	Form 5	Form 10	Form 20	Finish	Size	Form 10	Size	Form 10
1/2- inch	HLA151 100 130 lbs. \$ .60	HLA 1101 75 110 lbs. \$ .70	HLA 1201 50 100 lbs. \$ .95	Catalogue No Standard Pkg Ship. Wt. Std. Pkg. List Price, each	All	75	Back Hub  3/4-inch SideHubs  1/2-inch	75 290 lbs.
3/4- inch	HLA252 50 95 lbs. \$ .70	25 65 lbs. \$ .85	<b>\$</b> 1.05	Standard Pkg Ship. Wt. Std. Pkg. List Price, each	A		K	
1- inch	HLA353 25 65 lbs. \$ .95	HLA 3103 25 70 lbs. \$1.05	25	Catalogue No Standard Pkg Ship. Wt. Std. Pkg. List Price, each		nation of type G	XB and type I Co	ondulets,

Form 5, Form 10 and Form 20 are designations to indicate sizes of Condulet bodies which take fittings correspondingly classified on pages 62 and 63.

Important Information Concerning Condulet Bodies Listed on This Page

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, see page 182. For cast brass and cast bronze Condulet bodies, plain and with special finishes, see page 182. For aluminum Condulet bodies, plain and with black enamel finish, see page 182. Black enameled and galvanized Condulet bodies of the same type, size and form may be

assorted to make up a standard package. No other assortment is allowed.

We will furnish switches or fittings for above Condulet bodies, and enumerate them on pages 62

Gaskets are listed on page 176. Condulet reducers are listed on page 171. Covers for Condulet bodies of the G and H series are listed on page 61. Condulet bodies of the G and H series are listed on pages 57 to 60, inclusive.

\$ .23

#### **COVERS**

## For G and H Series of Condulet Bodies **Furnished with Fastening Screws**

(0)	Size of C	Cover	Form 5 of Form 10 Bodies	D Bodies	Size of	Cover	For Form 5 or Form 10 Bodies	For Form 20 Bodies	
	Std. Pkg	. Assorted	100	50	Std. Pk	g. Assorted	100	- 50	
Porcelain, 1-Wire Hole		POR	CELAIN	COVERS	WITH	WIRE HOLI	ES		
(00)	1-wire	Cat. No List, each		201 \$ .25	3-wire	Cat. No List, each	5103 \$ .10	203 \$ .25	
	2-wire	Cat. No List, each		202 \$ .25	4-wire	Cat. No List, each	510400 \$ .10	20400 \$ .25	
Porcelain, 4-Wire Hole	Weight	Std. Pkg.,	,, 45 lbs.	60 lbs.	Weight	Std. Pkg	45 lbs.	60 lbs.	
		METAL (	COVERS	WITH N	IPPLES	-Black Enam	el Finish	7	
0 0	Male	Cat. No List, each		205 \$ .35	3/8" Male	Cat. No List, each	\$ .25	207 \$ .40	
Metal, Male Nipple		Cat. No List, each		206 \$ .35	3/8" Female	Cat. No List, each		208 \$ .40	
		Cat. No List, each		2013 \$ .38	1/2" Male	Cat. No List, each	51015 \$ .30	2015 \$ .45	
		Cat. No List, each		2014 \$ .38	1/2" Female	Cat. No List, each	51016 \$ .30	2016 \$45	
Metal, Female Nipple	Weight	Std. Pkg	30 lbs.	35 lbs.	Weight	Std. Pkg	25 lbs.	30 lbs.	
	PORCELAIN COVERS WITH NIPPLES								
(6)		Cat. No List, each		209 \$ .43	3/8" Male	Cat. No List, each	\$ .35	2011 \$ .53	
Porcelain, Male Nipple		Cat. No List, each		2010 \$ .43	3/8" Female	Cat. No List, each	51012 \$ .35	2012 \$ .53	
A STATE OF THE PARTY OF THE PAR		Cat. No List, each		2019 \$ .48	1/2" Male	Cat. No List, each	51021 \$ .40	2021 \$ .58	
(0)		Cat. No List, each		2020 \$ .48	1/2" Female	Cat. No List, each	51022 \$ .40	2022 \$ .58	
Porcelain, Female Nipple	Weight S	Std. Pkg	60 lbs.	55 lbs.	Weight	Std. Pkg	60 lbs.	55 lbs.	
		BLAN	K META	L COVE	RS—Blac	k Enamel Fin	ish		
0 6 0	For	Sheet Steel	Cast Iron	Style	of Cover	For	Sheet	Cast	
Blank Metal	Form 5 or Form 10 Bodies	100	100 .	Catalogu Standard . Weight	Packag	er . Form 20 ge Bodies	2000 50 20 lbs.	2000g 50 20 lbs	

\$ .08 \$ .16 ..... List, each ...... The same covers fit both Form 5 and Form 10 Condulet bodies, and these covers are interchangeable on any Form 5 or Form 10 Condulet body of the G and H series. Covers for Form 20 Condulet bodies are interchangeable on any Form 20 Condulet body of

the G and H series.

Proper fastening screws are furnished with covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for metal covers, and will be furnished unless another finish is specified on the order. Galvanized finish will be furnished, if specifically ordered, at same price as black enamel finish. For special plated finishes, see page 182. For brass and bronze covers, plain and with special finishes, see page 182. For aluminum covers, plain and with black enamel finish, see page 182.

Black enameled, galvanized and porcelain covers of the same size may be assorted to make up a standard package, regardless of style of cover. No other assortment of covers only

Standard package discount is allowed on covers when an order is for a standard package of Condulet bodies and an equal number of covers for those bodies.

Condulet bodies of the G and H series are listed on pages 57 to 60, inclusive. Gaskets are listed on page 176. For sizes of wire holes in covers, see page 172.

Cover Paternes Page 611

(Cross Reference Page 61)

## CONDULET BODIES-J AND K SERIES TYPES J, JA AND JB

Take Norbitt Conduletto Fittings and Blank Metal Cover



Type J Showing Norbitt Condulette Receptacle with Shade Holder Groove Mounted (Broken-away and Exploded View)

Condulet bodies of the J and K series are so designed that the bases of Norbitt Conduletto fittings or blank metal covers fasten to them by means of a single screw.

The cap of the Norbitt Conduletto Hubbell plug receptacle is secured to its base by a single center screw.

The cap of a Norbitt Conduletto receptacle or rosette is secured to its base by two screws, which also complete the electrical connection.

A gasket is furnished with each Norbitt Conduletto fitting and blank metal cover, and makes the installation weatherproof.

\$ .75

\$1.05

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	10 V

#### TYPE J CONDULET BODIES-Black Enamel Finish Size in inches..... 3/4 1/2 1 Catalogue Number..... J11 J22 J33 Standard Package.... 200 100 50 Shipping Weight Std. Pkg..... 150 lbs. 240 lbs. 80 lbs.



## TYPE JA CONDULET BODIES-Black Enamel Finish

Size in inches	1/2	3/4	1
Catalogue Number Standard Package Shipping Weight Std. Pkg	100	JA22 75 110 lbs.	JA33 50 80 lbs.
List Price, each	\$ .70	\$ .85	\$1.15



#### TYPE JB CONDULET BODIES—Black Enamel Finish

Size in inches	1/2	3/4	1
Catalogue Number	100	JB22 75 120 lbs. \$ .85	JB33 50 90 lbs. \$1.15

Important Information Concerning Condulet Bodies Listed on This Page

List Price, each.....

Norbitt Conduletto fittings and the blank metal cover are made in one size only, and are interchangeable on all Condulet bodies of the J and K series.

Proper fastening screws are furnished with Norbitt Conduletto fittings and blank metal cover, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, see page 182. For cast brass and cast bronze Condulet bodies, plain and with special finishes, see page 182. For aluminum Condulet bodies, plain and with black enamel finish, see page 182. Black enameled and galvanized Condulet bodies of the same type and size may be assorted to

make up a standard package. No other assortment is allowed.

Norbitt Conduletto fittings are listed on page 187. Blank metal cover is listed on page 67. Gasket for Norbitt Conduletto fittings and blank metal cover is listed on page 176. Condulet reducers are listed on page 171.

Condulet bodies of the J and K series are listed on pages 65 to 67, inclusive.

#### CONDULET BODIES-J AND K SERIES-Continued

## TYPES JL, JT, JU, JX AND K

Take Norbitt Conduletto Fittings and Blank Metal Cover

	TYPE JL CONDULET	BODIES-	-Black Enam	nel Finish
	Size in inches	1/2	3/4	1
computer 1	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	100 140 lbs.	JL22 75 120 lbs. \$ .95	JL33 50 90 lbs. \$1.05
	TYPE JT CONDULET	BODIES-	Black Enam	nel Finish
-491	Size in inches	1/2	3/4	1
-annuer Depart	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each		JT222 75 130 lbs. \$1.05	JT333 50 100 lbs. \$1.15
	TYPE JU CONDULET	BODIES-	Black Enan	iel Finish
CONFORTEL	Size in inches	1/2	3/4	1
900	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	100 160 lbs.	JU22 75 140 lbs. \$ .85	JU33 50 110 lbs. \$1.15
	TYPE JX CONDULET	BODIES-	Black Enam	el Finish
-	Size in inches	1/2	3/4	1
20 mg	Catalogue Number	JX1111 100 180 lbs. \$1.05	JX2222 75 140 lbs. \$1.15	JX3333 50 120 lbs. \$1.30
1	TYPE K CONDULET	BODIES-	Black Enam	el Finish
IA TO BLOCK	Size in inches	1/2	3/4	1
	Catalogue Number		K2 75 85 lbs. \$ .65	K3 50 70 lbs. \$ .95

#### Important Information Concerning Condulet Bodies Listed on This Page

Norbitt Conduletto fittings and the blank metal cover are made in one size only, and are interchangeable on all Condulet bodies of the J and K series.

Proper fastening screws are furnished with Norbitt Conduletto fittings and blank metal cover, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, see page 182. For cast brass and cast bronze Condulet bodies, plain and with special finishes, see page 182. For aluminum Condulet bodies, plain and with black enamel finish, see page 182.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Norbitt Conduletto fittings are listed on page 187. Blank metal cover is listed on opposite page. Gasket for Norbitt Conduletto fittings and blank metal cover is listed on page 176. Condulet reducers are listed on page 171. Condulet bodies of the J and K series are listed on pages 65 to 67, inclusive.

## CONDULET BODIES-J AND K SERIES-Continued TYPES KA, KB, KC AND KD

Take Norbitt Conduletto Fittings and Blank Metal Cover

Self-frents.	TYPE KA CONDULET BODIES—Black E			Enamel Finish	
	Size in inches	1/2	3/4	1	
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	KA1 100 110 lbs. \$ .60	KA2 75 90 lbs. \$ .75	KA3 50 75 lbs. \$1.05	
IS NOT THE WORLD	TYPE KB CONDULET	BODIES-	Black Enan	nel Finish	
	Size in inches	1/2	3/4	1	
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	KB1 100 110 lbs. \$ .60	KB2 75 90 lbs. \$ .75	KB3 50 75 lbs. \$1.05	
	TYPE KC CONDULET	BODIES-	-Black Enan	nel Finish	
	Size in inches	1/2	3/4	1	
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	KC1 100 160 lbs. \$ .60	KC2 75 125 lbs. \$ .75	KC3 50 100 lbs. \$1.05	
William Control	TYPE KD CONDULET BODIES—Black Enamel Finish				
100	Size in inches	1/2	3/4	1	
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	KD1 100 160 lbs. \$ .60	KD2 75 125 lbs. \$ .75	KD3 50 100 lbs. \$1.05	
CEPTERST.	BLANK META For 1-2, 3-4 and 1-inch Con				
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	J100 200 90 lbs. \$ .30	cover i	olank meta s furnished ket and fas rew.	

Important Information Concerning Condulet Bodies and Blank Metal Cover Listed on This Page Norbitt Conduletto fittings and the blank metal cover are made in one size only, and are interchangeable on all Condulet bodies of the J and K series.

Proper fastening screws are furnished with Norbitt Conduletto fittings and blank metal cover,

and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies and blank metal cover, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies and all galvanized finish on blank metal cover will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, see page 182. For cast brass and cast bronze Condulet bodies and blank metal cover, plain and with special finishes, see page 182. For aluminum Condulet bodies and blank metal cover, plain and with black enamel finish, see page 182.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to

make up a standard package. No other assortment of Condulet bodies is allowed. Black enameled and galvanized blank metal covers may be assorted to make up a standard package. No other assortment of covers is allowed.

Standard package discount is allowed on covers when an order is for a standard package of Condulet bodies and an equal number of covers for those bodies; but on an order for covers alone, standard package discount is allowed, only, on the specified standard package quantity of covers.

Norbitt Condulatto fittings are listed on page 187. Gasket for Norbitt Condulatto fittings and blank metal cover is listed separately on page 176. Condulat reducers are listed on page 171.

Condulet bodies of the J and K series are listed on pages 65 to 67, inclusive.

#### CONDULET BODIES WITH ELLIPTICAL OPENINGS-RJ AND RK SERIES

## TYPES RJ AND RJA

Take Elliptical Conduletto Fittings and Elliptical Covers



Type RJ Showing Elliptical Conduletto Receptacle (Broken-away and Exploded View)



Type RJ Showing Elliptical Conduletto Rosette (Broken-away and Exploded View)

Condulet bodies with elliptical openings are so designed that elliptical Conduletto fittings and elliptical covers fasten to them by means of two screws which are always accessible. These two screws secure both cap and base of an elliptical Conduletto fitting to the Condulet body.

Ample space is provided in the Condulet body for the unobstructed passage of extra wires.

A gasket is furnished with each elliptical Conduletto fitting, and makes the installation weather-proof. Gaskets are not furnished with elliptical covers, and if desired must be ordered separately.

	TYPE RJ CONDULET	TYPE RJ CONDULET BODIES—Black Enamel Finish						
	Size in inches	Size in inches		1				
Const	Catalogue Number Standard Package Shipping Weight Std. Pkg List Price, each	RJ11 200 240 lbs. \$ .50	RJ22 100 130 lbs. \$ .60	RJ33 50 80 lbs. \$ .90				
	TYPE RJA CONDULET BODIES—Black Enamel Finish							
	Size in inches	1/2	3/4 -	1				
0300	Catalogue Number	RJA11 100 140 lbs. \$ .60	RJA22 75 110 lbs. \$ .70	RJA33 50 85 lbs. \$1.00				

#### Important Information Concerning Condulet Bodies Listed on This Page

Elliptical Conduletto fittings and elliptical covers are made in one size only, and are interchangeable on Condulet bodies of the RJ and RK series.

Proper fastening screws are furnished with elliptical Conduletto fittings and elliptical Condulet covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, see page 182. For cast brass and cast bronze Condulet bodies, plain and with special finishes, see page 182. For aluminum Condulet bodies, plain and with black enamel finish, see page 182.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Elliptical Conduletto fittings are listed on page 189. Elliptical covers are listed on page 73. Elliptical gaskets are listed on page 176. Condulet reducers are listed on page 171. Condulet bodies of the RJ and RK series are listed on pages 69 to 72, inclusive.

## CONDULET BODIES WITH ELLIPTICAL OPENINGS-RJ AND RK SERIES-Continued

## TYPES RJB, RJD, RJF, RJK AND RJL

#### Take Elliptical Conduletto Fittings and Elliptical Covers

	TYPE RJB CONDULET	BODIES	-Black Ena	mel Finish		
	Size in inches	1/2	3/4	1		
10	Catalogue Number	RJB11 100 150 lbs. \$ .70	RJB22 75 120 lbs. \$ .80	RJB33 50 90 lbs. \$ .90		
	TYPE RJD CONDULET	BODIES	-Black Ena	mel Finish		
10	Size in inches	1/2	3/4	1		
Soft and the	Catalogue Number	RJD11 100 160 lbs. \$ .60	RJD22 75 130 lbs. \$ .70	RJD33 50 95 lbs. \$1.00		
had marinost nets	TYPE RJF CONDULET BODIES—Black Enamel Finish					
FIG. S. PROVIDE	Size in inches	1/2	3/4	1		
dalant linears o	Catalogue Number	RJF11 100 170 lbs. \$ .70	RJF22 75 140 lbs. \$ .80	RJF33 50 100 lbs. \$ .90		
	TYPE RJK CONDULET	BODIES	-Black Ena	mel Finish		
10	Size in inches	1/2	3/4	1		
OVER UP	Catalogue Number	RJK11 100 160 lbs. \$ .70	RJK22 75 130 lbs. \$ .80	RJK33 50 95 lbs. \$ .90		
salie I hear	TYPE RJL CONDULET	BODIES-	-Black Ena	mel Finish		
	Size in inches	1/2	3/4	1		
	Catalogue Number	RJL11 100 150 lbs. \$ .70	RJL22 75 120 lbs. \$ .80	RJL33 50 90 lbs. \$ .90		

#### Important Information Concerning Condulet Bodies Listed on This Page

Elliptical Conduletto fittings and elliptical covers are made in one size only, and are interchangeable on Condulet bodies of the RJ and RK series.

Proper fastening screws are furnished with elliptical Conduletto fittings and elliptical Condulet

covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, see page 182. For cast brass and cast bronze Condulet bodies, plain and with special finishes, see page 182. For aluminum Condulet bodies, plain and with black enamel finish, see

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Elliptical Conduletto fittings are listed on page 189. Elliptical covers are listed on page 73. Elliptical gaskets are listed on page 176. Condulet reducers are listed on page 171. Condulet bodies of the RJ and RK series are listed on pages 69 to 72, inclusive and by

#### CONDULET BODIES WITH ELLIPTICAL OPENINGS—RJ AND RK SERIES—Continued

## TYPES RJR, RJT, RJU, RJX AND RK

Take Elliptical Conduletto Fittings and Elliptical Covers

	TYPE RJR CONDULET	BODIES-	Black Enar	nel Finish
-400	Size in inches	1/2	3/4	1
	Catalogue Number	RJR11 100 150 lbs. \$ .70	RJR22 75 120 lbs. \$ .80	RJR33 50 90 lbs. \$ .90
	TYPE RJT CONDULET	BODIES-	Black Enar	nel Finish
-150	Size in inches	1/2	3/4	1
Supplement of the supplement o	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	RJT111 100 160 lbs. \$ .80	RJT222 75 130 lbs. \$ .90	RJT333 50 95 lbs. \$1.00
	TYPE RJU CONDULET	BODIES-	Black Enar	nel Finish
	Size in inches	1/2	3/4	1
90°	Catalogue Number	RJU11 100 135 lbs. \$ .60	RJU22 75 100 lbs. \$ .70	RJU33 50 80 lbs. \$ .95
1	TYPE RJX CONDULET	BODIES-	Black Enar	nel Finish
_1	Size in inches	1/2	3/4	1
	Catalogue Number	RJX1111 100 160 lbs. \$ .90	RJX2222 75 130 lbs. \$1.00	RJX3333 50 95 lbs. \$1.10
	TYPE RK CONDULET	BODIES-	-Black Enan	nel Finish
18 -	Size in inches	1/2	3/4	1
	Catalogue Number Standard Package Shipping Weight Std. Pkg List Price, each	RK1 100 135 lbs. \$ .40	RK2 75 100 lbs. \$ .55	RK3 50 80 lbs. \$ .80

#### Important Information Concerning Condulet Bodies Listed on This Page

Elliptical Conduletto fittings and elliptical covers are made in one size only, and are interchangeable on Condulet bodies of the RJ and RK series.

Proper fastening screws are furnished with elliptical Conduletto fittings and elliptical Condulet covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, see page 182. For cast brass and cast bronze Condulet bodies, plain and with special finishes, see page 182. For aluminum Condulet bodies, plain and with black enamel finish, see page 182.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Elliptical Conduletto fittings are listed on page 189. Elliptical covers are listed on page 73. Elliptical gaskets are listed on page 176. Condulet reducers are listed on page 171.

Condulet bodies of the RJ and RK series are listed on pages 69 to 72, inclusive.

(Cross Reference Page 71)

# CONDULET BODIES WITH ELLIPTICAL OPENINGS—RJ AND RK SERIES—Continued TYPES RKA, RKB, RKC, RKD AND RKK

Take Elliptical Conduletto Fittings and Elliptical Covers

	TYPE RKA CONDULET	BODIES	-Black Enar	nel Finish	
	Size in inches	1/2	3/4	1	
	Catalogue Number	100	RKA2 75 100 lbs. \$ .60	RKA3 50 80 lbs. \$ .90	
102 4 2 2 1	TYPE RKB CONDULET	BODIES	—Black Ena	mel Finish	
	Size in inches	1/2	3/4	1	
The state of the s	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	RKB1 100 135 lbs. \$ .50	RKB2 75 100 lbs. \$ .60	RKB3 50 80 lbs. \$ .90	
SARAS TO A	TYPE RKC CONDULET BODIES—Black Enamel Finish				
	Size in inches	1/2	3/4	1 1	
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	100 170 lbs.	RKC2 75 140 lbs. \$ .60	RKC3 50 100 lbs. \$ .90	
n. Italy	TYPE RKD CONDULET	BODIES	—Black Ena	mel Finish	
·	Size in inches	1/2	3/4	1	
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	100 170 lbs.	RKD2 75 140 lbs. \$ .60	RKD3 50 100 lbs. \$, .90	



#### TYPE RKK CONDULET BODIES—Black Enamel Finish

Size in inches	1/2	3/4	1
Catalogue Number	100	RKK2 75 130 lbs. \$ .60	RKK3 50 100 lbs. \$ .90

Important Information Concerning Condulet Bodies Listed on This Page

Elliptical Conduletto fittings and elliptical covers are made in one size only, and are interchangeable on Condulet bodies of the RJ and RK series.

Proper fastening screws are furnished with elliptical Conduletto fittings and elliptical Condulet covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, see page 182. For east brass and cast bronze Condulet bodies, plain and with special finishes, see page 182. For aluminum Condulet bodies, plain and with black enamel finish, see page 182.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Elliptical Conduletto fittings are listed on page 189. Elliptical covers are listed on page 78. Elliptical gaskets are listed on page 176. Condulet reducers are listed on page 171.

Condulet bodies of the RJ and RK series are listed on pages 69 to 72, inclusive.

#### **ELLIPTICAL COVERS**

For Condulet Bodies with Elliptical Openings-Types RJ and RK Series Furnished with Pastening Screws









Standard Package Assorted	200	Standard Package Assorted	200
		<u> </u>	

#### PORCELAIN WIRE HOLE AND BLANK METAL COVERS

1-wire	Catalogue Number List Price, each	\$ .10	Sheet Steel	Catalogue Number List Price, each	RK00 \$.08
2-wire	Catalogue Number List Price, each		Cast	Catalogue Number	R Koof
3-wire	Catalogue Number List Price, each		Iron (Flange)	List Price, each	
Shipping V	Veight Std. Pkg	60 lbs.	Shipping V	Veight Std. Pkg	40 lbs.

#### METAL COVERS WITH NIPPLES—Black Enamel Finish

% Male	Catalogue Number List Price, each	<b>\$</b> .20	% Marie	Catalogue Number List Price, each	<b>\$</b> .25
1/8" Female	Catalogue Number List Price, each	RK06 \$ .20	3/8" Female	Catalogue Number List Price, each	RK08 \$.25
1/4" Male	Catalogue Number List Price, each	RK013 \$ .23		Catalogue Number List Price, each	
1/4" Female	Catalogue Number List Price, each	RK014 \$.23	½" Female	Catalogue Number List Price, each	RK016 \$ .30
Shipping W	eight Std. Pkg	50 lbs.	Shipping W	Veight Std. Pkg	60 lbs.

#### PORCELAIN COVERS WITH NIPPLES

1/8" Male	Catalogue Number List Price, each	<b>8</b> .25	% mrane	Catalogue Number List Price, each	<b>3</b> .35
1/8" Female	Catalogue Number List Price, each	RK010 \$ .25	3/8" Female	Catalogue Number List Price, each	RK012 \$ .35
1/4" Male	Catalogue Number List Price, each	RK019 \$ .30	1/2" Male	Catalogue Number List Price, each	RK021 \$ .40
1/4" Female	Catalogue Number List Price, each	RK020 \$ .30	1/2" Female	Catalogue Number List Price, each	RK022 \$ .40
Shipping W	eight Std. Pkg	90 lbs.	Shipping V	Veight Std. Pkg	95 lbs.

Important Information Concerning Covers Listed on This Page

Elliptical covers are made in one size only, and are interchangeable on all elliptical Condulet bodies — RJ and RK series.

Proper fastening screws are furnished with covers, and are so held in screw holes that they can not fall out.

Finishes: Black enamel is the standard finish for metal covers, and will be furnished unless another finish is specified on the order. Galvanized finish, when specifically ordered, will be furnished at same price as black enamel finish. For special plated finishes, see page 182. For brass and bronze covers, plain and with special finishes, see page 182. For aluminum covers, plain and with black enamel finish, see page 182.

Black enameled, galvanized and porcelain elliptical covers may be assorted to make up a standard package. No other assortment is allowed.

Standard package discount is allowed on covers when an order is for a standard package of Condulet bodies and an equal number of covers for those bodies; but on an order for covers alone, standard package discount is allowed, only, on the specified standard package quantity of covers.

For sizes of wire holes in covers, see page 172.

Condulet bodies of the RJ and RK series are listed on pages 69 to 72, inclusive. Elliptical gaskets are listed on page 176. Digitized by GOOGLE

#### CONDULETS-N SERIES

## TYPES N, NA, NC, NL, NT AND NX

For Stucco Work, Using Flush Pocket Receptacles—Crouse-Hinds, C9514; Bryant, 4033, 9514; G. E. Co., 9514; Paiste, 9514; P. & S., 9514, and Hubbell Flush Plug Receptacle, 5506

Furnished Complete with Telescopic Cover (H-inch Telescope,) Temporary Cap and all Necessary Fastening Screws, but without Receptacle

	TYPE N COND	ULETS—Blac	k Enamel Fin	ish		
	Size in inches	1/2	3/4	1		
6	Catalogue Number Standard Package Shipping Weight Std. Pkg.	100	N2000 75 110 lbs.	N3000 25 55 lbs.		
	List Price, each		\$ .95	\$1.05		
	TYPE NA CONI	ULETS—Bla	ck Enamel Fir	nish		
	Size in inches	1/2	3/4	1		
	Catalogue Number Standard package		NA2000 75	NA3000 25		
	Shipping Weight Std. Pkg List Price, each	130 lbs.	135 lbs. \$ .95	60 lbs. \$1.05		
	TYPE NC COND	ULETS-Bla	ck Enamel Fi	nish		
	Size in inches	1/2	3/4	1		
	Catalogue Number Standard Package	NC11000	NC22000 75	NC33000 25		
Broken-away View Showing Receptacle Installed Prices do not include receptacle	Shipping Weight Std. Pkg List Price, each	165 lbs.	130 lbs. \$1.05	70 lbs. \$1.15		
	TYPE NL CONDULETS—Black Enamel Finish					
	Size in inches	1/2	3/4	1		
	Catalogue Number Standard Package	NL11000 100	NL22000 75	NL33000 25		
S training d	Shipping Weight Std. Pkg List Price, each	165 lbs.	130 lbs. \$1.05	70 lbs \$1.15		
	TYPE NT COND	ULETS-Bla	ck Enamel Fi	nish		
- UR	Size in inches	1/2	3/4	1		
	Catalogue Number Standard Package	NT111000	NT222000 75	NT333000		
2	Shipping Weight Std. Pkg List Price, each	175 lbs.	150 lbs. \$1.15	80 lbs. \$1.35		
	TYPE NX COND	ULETS-Bla	ck Enamel Fi	nish		
	Size in inches	1/2	3/4	1		
- A.S.	Catalogue Number Standard Package	NX1111000 100	NX2222000	N X3333000 25		
	Shipping Weight Std. Pkg List Price, each	190 lbs.	170 lbs. \$1.25	85 lbs. \$1.50		

We will furnish receptacles for condulets listed above. Telescopic cover is listed separately on page 79 of Condulet Catalogue No. 1000

(Cross Reference Page 79)



# CONDULETS—PG SERIES TYPES PG, PGB, PGC, PGCA, PGL, PGT AND PGG Take General Electric 2 H. P., 250-Volt, 3-Phase, Snap Switch 151394 with Protective Cover for Textile Mill Installations. Furnished with all necessary Fastening Screws



## Showing Switch Installed Prices do not Include Switch

#### TYPE PG CONDULETS-Black Enamel Finish

Size in inches	1/2	3/4	1
Catalogue Number	PG1	PG2	PG3
Standard Package	35	25	10
Shipping Weight Std. Pkg	85 lbs.	70 lbs.	50 lbs.
List Price, each	\$1.10	\$1.25	\$1.40



#### TYPE PGB CONDULETS-Black Enamel Finish

Size in inches	1/2	3/4	1
Catalogue Number		PGB22	PGB33
Standard Package	35	25	10
Shipping Weight Std. Pkg	95 lbs.	90 lbs.	50 lbs.
List Price, each	\$1.25	\$1.40	\$1.55



#### TYPE PGC CONDULETS-Black Enamel Finish

Size in inches	1/2	3/4	1
Catalogue Number Standard Package	PGC11	PGC22 25	PGC33
Shipping Weight Std. Pkg List Price, each	95 lbs.	90 lbs. \$1.40	50 lbs. \$1.55



#### TYPE PGCA CONDULETS—Black Enamel Finish

Size in inches		3/4	1
Catalogue Number	PGCA111		PGCA333
Standard Package	125 lbs.	25 115 lbs.	60 lbs.
List Price, each		\$1.60	\$1.75



#### TYPE PGL CONDULETS-Black Enamel Finish

Size in inches	1/2	3/4	1
Catalogue Number		PGL22	PGL33
Standard Package	35	.25	10
Shipping Weight Std. Pkg	95 lbs.	90 lbs.	50 lbs.
List Price, each	\$1.25	\$1.40	\$1.55



#### TYPE PGT CONDULETS—Black Enamel Finish

Size in inches	1/2	3/4	1
Catalogue Number	PGT111	PGT222	PGT333
Standard Package	35	25	10
Shipping Weight Std. Pkg	125 lbs.	115 lbs.	60 lbs.
List Price each	\$1.45	\$1.60	\$1.75



#### TYPE PGG CONDULETS—Black Enamel Finish

Size in inches	1/2	3/4	1
Catalogue Number		PGG22	PGG33
Standard Package		25	10
Shipping Weight Std. Pkg		90 lbs.	50 lbs.
List Price, each	\$1.25	\$1.40	\$1.55

We will furnish switch for use with condulets of the PG series.
(Cross Reference Page 79A) Digitized by

#### CONDULETS-PM SERIES

## TYPES PM, PMA, PMC, PML, PMT AND PMX

Take 3 to 4-inch Canopies

For Electroliers and Combination Gas and Electric Fixtures, also Abolite G403

	TYPE 1	PM CON	DULETS-	-Black Ena	mel Finish			
	Size in inches	1/2	3/4	1	11/4	11/2		
	Catalogue No Standard Pkg Wt. Std. Pkg List Price, each	PM1 35 80 lbs. \$ .90	PM2 25 65 lbs. \$1.05	PM3 10 45 lbs. \$1.20	PM4 10 50 lbs. \$1.35	PM5 10 55 lbs. \$1.50		
1	TYPE	PMA CO	NDULETS	-Black E	namel Fini	sh		
	Size in inches	1/2	3/4	1	11/4	11/2		
	Catalogue No Standard Pkg Wt. Std. Pkg List Price, each	PMA1 35 80 lbs. \$ .90	PMA2 25 65 lbs. \$1.05	PMA3 10 45 lbs. \$1.20	PMA4 10 50 lbs. \$1.35	PMA5 10 55 lbs. \$1.50		
	TYPE	TYPE PMC CONDULETS—Black Enamel Finish						
	Size in inches	1/2	3/4	1	11/4	11/2		
	Catalogue No Standard Pkg Wt. Std. Pkg List Price, each	90 lbs.	PMC22 25 85 lbs. \$1.20	PMC33 10 45 lbs. \$1.35	PMC44 10 50 lbs. \$1.50	PMC55 10 55 lbs. \$1.65		
	TYPE 1	PML CO	ndulets	—Black E	namel Fini	sh		
	Size in inches	1/2	3/4	1	11/4	11/2		
	Catalogue No Standard Pkg Wt. Std. Pkg List Price, each	PML11 35 90 lbs. \$1.05	PML22 25 85 lbs. \$1.20	PML33 10 45 lbs. \$1.35	PML44 10 50 lbs. \$1.50	PML55 10 55 lbs. \$1.65		
	TYPE I	MT CO	NDULETS	-Black Er	namel Pini	sh		
	Size in inches	1/2	3/4	1	11/4	11/2		
	Catalogue No Standard Pkg Wt. Std. Pkg List Price, each	PMT111 35 120 lbs. \$1.25	PMT222 25 110 lbs. \$1.40	PMT333 10 55 lbs. \$1.55	PMT444 10 60 lbs. \$1.70	PMT555 10 65 lbs. \$1.85		
	TYPE 1	PMX CO	NDULETS	—Black Er	namel Fini	sh		
	Size in inches	1/2	3/4	1	11/4	11/2		
	Catalogue No Standard Pkg Wt. Std. Pkg List Price, each	35 140 lbs.	PMX2222 25 120 lbs. \$1.55	PMX3333 10 60 lbs. \$1.70	PNX4444 10 65 lbs. \$1.85	PNX5655 10 70 lbs. \$2.00		

We will furnish accessories for use with Condulets of the PM series. For finishes and assortments, see note on page 89.

Grounding clamp, for use with combination gas and electric fixtures, is not included in prices for Condulets of the PM series, but will be furnished, if specifically ordered. Condulet reducers are listed on page 171.

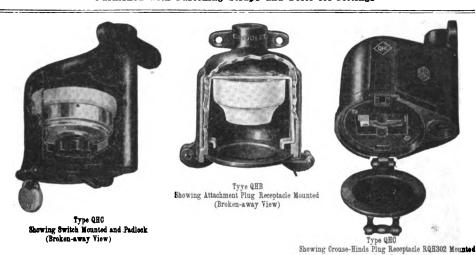


#### CONDULETS-OH SERIES

## TYPES OHA AND OHB

Weather-Proof Condulets for Thumb Knob Snap Switches, Attachment Plug Receptacles and Crouse-Hinds Plug Receptacles ROH302 and ROH303

Furnished with Fastening Straps and Bolts for Fittings



TYPE QHA CONDULETS—Black Enamel Finish

(Door Open)

#### Size in inches ..... 1/2 3/4 1 Form Catalogue Number. QHA1510 QHA2510 QHA3510 10 35 Standard Package... 15 80 lbs. 60 lbs. 45 lbs. Weight Std. Pkg... List Price, each .... **\$1.25** \$1.40 \$1.55 QHA120 QHA220 QHA320 Catalogue Number. Standard Package... $2\overline{5}$ Form 15 150 lbs. 110 lbs. 70 lbs. Weight Std. Pkg... 20 \$1.65 \$1.80 List Price, each . . . . \$2.00 TYPE QHB CONDULETS—Black Enamel Finish



	Size in inches	1/2	3/4	1
Form 10	Catalogue Number. Standard Package Weight Std. Pkg List Price, each	QHB1510 35 75 lbs. \$1.30	QHB2510 25 60 lbs. \$1.45	QHB3510 15 45 lbs. \$1.60
Form 20	Catalogue Number. Standard Package Weight Std. Pkg	QHB120 35 140 lbs.	QHB220 25 100 lbs.	QHB320 15 70 lbs.

Fittings for use with Condulets of the QH series are not included in above list prices, but are enumerated on opposite page.

Padlock is not included in above list prices for Condulets of the QH series.

For finishes and assortments, see note on opposite page.

Crouse-Hinds plug receptacles RQH302 and RQH303, for use with Condulets of the QH series, are listed on page 91a.

Condulet reducers are listed on page 171.

Listings of the QH series of Condulets are continued on page 89 pigitized by

#### CONDULETS-QH SERIES-Continued

## TYPES QHC, QHL AND QHT

Weather-Proof Condulets for Thumb Knob Snap Switches, Attachment Plug Receptacles and Crouse-Hinds Plug Receptacles RQH302 and RQO303

Furnished with Fastening Straps and Bolts for Fittings

rum	siled w	ith rasteming straps an	d Bolts for Fr	ungs	
		TYPE QHC CONI	OULETS-Bla	ck Enamel F	inish
		Size in inches	1/2	3/4	1
	Form 10	Catalogue Number Standard Package Weight Std. Pkg List Price, each	35 120 lbs.	QHC22510 25 90 lbs. \$1.75	QHC33510 15 60 lbs. \$2.00
	Form 20	Catalogue Number Standard Package Weight Std. Pkg List Price, each	35	QHC2220 25 120 lbs. * \$2.30	QHC3320 15 80 lbs. \$2.60
A		TYPE QHL CONI	ULETS—Bla	ck Enamel F	inish
(4)		Size in inches	1/2	3/4	1
	Form 10	Catalogue Number Standard Package Weight Std. Pkg List Price, each	35 90 lbs.	QHL22510 25 60 lbs. \$1.55	QHL33510 15 50 lbs. \$1.70
The second	Form 20	Catalogue Number Standard Package Weight Std. Pkg List Price, each	35 150 lbs.	QHL2220 25 100 lbs. \$2.10	QHL3320 15 70 lbs. \$2.30
		TYPE QHT CONI	DULETS—B1	ack Enamel F	inish
		Size in inches	1/2	3/4	1
	Form 10	Catalogue Number Standard Package Weight Std. Pkg List Price, each	QHT111510 35		QHT333510 15 60 lbs. \$2.15
	Form 20	Catalogue Number Standard Package Weight Std. Pkg List Price, each	35 160 lbs.	QHT22220 25 110 lbs. \$2.45	QHT33320 15 90 lbs. \$2.80

Important Information Concerning Condulets Listed on This and the Opposite Page Fittings for use with Condulets of the QH series are not included in above list prices, but are as follows:

#### For Form 10

Thumb Knob Snap Switches: All 5, and 10 ampere, 125 and 250 volt switches enumerated on pages 62 and 63, and all 5 and 10 ampere, 600 volt switches not over 23-8 inches deep over all, not over 1 15-16 inches deep to top of cover, and with bases not exceeding 21-2 inches in diameter, enumerated on the same pages,

Attachment Plug Receptacles: HUBBELL—5617, 5621, 5624, 5757. G. B. CO.—102700.

Crouse-Hinds, 30 Ampere, 2-Pole, Plug Receptacle—RQH302.

#### For Form 20

Thumb Knob Snap Switches: All 5, 10 and 20 ampere, 125 and 250 volt switches enumerated on pages 62 and 63, and all 5, 10 and 20 ampere, 600 volt switches not over 3 inches deep over all, not over 2.5-8 inches deep to top of cover, and with bases not exceeding 3.3-8 inches in diameter, enumerated on the same pages.

Attachment Plug Receptacles: HUBBELL—5617, 5621, 5624, 5757. G. B. CO.—102700.

Crouse-Hinds; 30 Ampere, 3-Pole, Plug Receptacle—RQH303.

Padlock is not included in above list prices for Condulets of the QH series.

Finishes: Black enamel is the standard finish for Condulets, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulets will be furnished, at same price as all black enamel finish, when the lorder specifies galvanized finish. For special plated finishes, see page 182 For cast brass and cast bronze Condulets, plain and with special finishes, see page 182. For special plated finishes, see page 182. aluminum Condulets, plain and with black enamel finish, see page 182.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Crouse-Hinds plug receptacles RQH302 and RQH303, for use with Condulets of the QH series, are listed on page 91a.

Pastening straps are listed separately on page 175. Condulet reducers are listed on page 1717

# CONDULETS—QK SERIES TYPES QKA AND QKB

Weather-Proof Condulets for Standard Lock Snap Switches and Crouse-Hinds Plug Receptacles RQK302 and RQK303

Furnished with Covers, Pastening Straps and Bolts for Switches and all necessary Screws



Type QIC Showing Lock Snap Switch Mounted (Broken-away View)



Type QLA
Showing Grouse-Hinds Plug Receptacle
RQE302 Mounted

		TYPE QKA CONDULETS—Black Enamel Finish						
		Size in inches	1/2	3/4	1			
	Form 10	Catalogue Number Standard Package Weight Std. Pkg List Price, each	QKA1510 35 70 lbs. \$1.10	QKA2510 25 55 lbs. \$1.20	QKA3510 15 40 lbs. \$1.35			
	Form 20	Catalogue Number Standard Package Weight Std. Pkg List Price, each	QKA120 35 120 lbs. \$1.45	QKA220 25 90 lbs. \$1.60	QKA320 15 60 lbs. \$1.80			
19		TYPE QKB CONDULETS—Black Enamel Finish						
		Size in inches	1/2	3/4	1			
	Form 10	Catalogue Number Standard Package Weight Std. Pkg List Price, each	QKB1510 35 70 lbs. \$1.15	QKB2510 25 55 lbs. \$1.25	QKB3510 15 40 lbs. \$1.40			
and the state of t	Form 20	Catalogue Number Standard Package Weight Std. Pkg List Price, each	35	QKB220 25 90 lbs. \$1.70	QKB320 15 60 lbs. \$1.85			

Important Information Concerning Condulets Listed on This Page

Fittings for use with Condulets of the QK series are not included in above list prices, but are enumerated on opposite page.

For finishes and assortments, see note on opposite page.

Crouse-Hinds plug receptacles RQK302 and RQK303, for use with Condulets of the QK series, are listed on page 91a.

Fastening strops are listed separately on page 175. Condulet reducers are listed on page 171. Listings of the QK series of Condulets are continued on page 91.

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#### CONDULETS-OK SERIES-Continued

## TYPES OKC, OKL AND OKT

Weather-Proof Condulets for Standard Lock Snap Switches and Crouse-Hinds Plug Receptacles RQK302 and RQK303

Furnished with Covers, Fastening Straps and Bolts for Switches and all necessary Screws

		TYPE QKC CON	DULETS—B1	ack Enamel F	nish
		Size in inches	1/2	3/4	1
	Form 10	Catalogue No Standard Package Weight Std. Pkg List Price, each	35 100 lbs.	QKC22510 25 70 lbs. \$1.50	QKC33510 15 50 lbs. \$1.70
	Form 20	Catalogue No Standard Package Weight Std. Pkg List Price, each	35 160 lbs.	QKC2220 25 120 lbs. \$2.00	QKC3320 15 80 lbs. \$2.30
	-	TYPE QKL CON	ack Enamel Fi	nish	
		Size in inches	1/2	3/4	1
	Form 10	Catalogue No Standard Package Weight Std. Pkg List Price, each	35 90 lbs.	QKL22510 25 60 lbs. \$1.35	QKL33510 15 45 lbs. \$1.50
	Form 20	Catalogue No Standard Package Weight Std. Pkg List Price, each	35 150 lbs.	QKL2220 25 110 lbs. \$1.85	QKL3320 15 75 lbs. \$2.05
		TYPE QKT CONI	DULETS—B1	ick Enamel Fi	nish
		Size in inches	1/2	3/4	1
	Form 10	Catalogue No Standard Package Weight Std. Pkg List Price, each	35 110 lbs.	QKT222510 25 80 lbs. \$1.60	QKT333510 15 60 lbs. \$1.90
AMA NEW YORK	Form 20	Catalogue No Standard Package Weight Std. Pkg List Price, each	35 170 lbs.	QKT22220 25 130 lbs. \$2.20	QKT33320 15 85 lbs. \$2.50

Important Information Concerning Condulets Listed on This and the Opposite Page Fittings for use with Condulets of the QK series are not included in above list prices, but are as follows:

#### For Form 10

Lock Snap Switches: All 5 and 10-ampere, 125 and 250 volt switches enumerated on pages 62 and 63, and all 5 and 10 ampere, 600 volt switches not over 15-8 inches deep to top of cover and with bases not exceeding 2 9-16 inches in diameter, enumerated on the same pages.

Crouse-Hinds, 30 Ampere, 2-pole, Plug Receptacle—RQK302

#### For Form 20

Lock Snap Switches: All 5, 10 and 20 ampere, 125 and 250 volt switches enumerated on pages 62 and 63, and all 5, 10 and 20 ampere, 600 volt switches not over 2 5-16 inches deep to top of cover and with bases not exceeding 3 7-16 inches in diameter, enumerated on the same pages.

Crouse-Hinds, 30 Ampere, 3-pole, Plug Receptacle—RQK303.

Finishes: Black enamel is the standard finish for Condulets, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulets will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, see page 182. For cast brass and cast bronze Condulets, plain and with special finishes, see page 182. For aluminum Condulets, plain and with black enamel finish, see page 182.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Crouse-Hinds plug receptacles RQK302 and RQK303, for use with Condulets of the QK series, are listed on page 168.

Fastening straps are listed separately on page 175. Condulet reducers are listed on page 171.

#### CONDULETS-MP SERIES

#### TYPES MP AND MPD

For Telephone Bell Boxes

Type MP takes Western Electric Telephone Bell Box 334A
Type MPD takes Stromberg-Carlson Telephone Bell Box 1131-F
Furnished with Fastening Screws for Bell Box

	TYPE MP CONDULETS—Black Enamel Finish					
di di	Size in inches	1/2	3/4	1		
في	Catalogue Number	MP1 25	MP2 25 220 lbs. \$2.70	MP3 25 220 lbs. \$2.80		
	TYPE MPD CONDULETS—Black Enamel Finish					
	TYPE MPD CONDULETS-	-Black Ena	mel Finish			
· B	Size in inches	-Black Ena	mel Finish	1		

#### RECEPTACLES AND PLUGS

## TYPES ROH AND ROK RECEPTACLES AND TYPE RO PLUGS

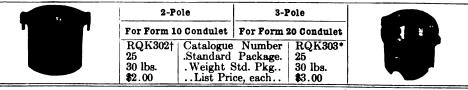
Two-Pole Types RQH and RQK Receptacles are for use with Form 10 Condulets of the QH and QK Series, respectively

Three-Pole Types RQH and RQK Receptacles are for use with Form 20 Condulets of the QH and QK Series, respectively

## TYPE RQH RECEPTACLES—30 Ampere Capacity For Condulets of the QH Series

2-Pole	3-Pc	ole	
 For Form 10 Condulet	For Form 20	O Condulet	The second second
RQH302* Catalogue	Number	RQH303*	~
		25	
30 lbsWeight	Std. Pkg	30 lbs.	
\$2.00List Pri	ce, each.	<b>\$</b> 3.00	

## TYPE RQK RECEPTACLES—30 Ampere Capacity For Condulets of the QK Series



## TYPE RQ PLUGS—30 Ampere Capacity For Types RQH, RQK and RYQ Receptacles

2-P	ole	3-1	Pole	
RQ302 25 60 lbs. \$3.50	.Standard .Weight	Number Package. Std. Pkg ice, each	RQ303 25 70 lbs. \$5.00	

\*To be mounted on fastening strap furnished with the Condulet. †Furnished with special mounting strap.

Condulets that take type RQH receptacles are listed on pages 88 and 89. Condulets that take RQK receptacles are listed on pages 90 and 91. Type RYQ receptacles, which take type RQ plugs, are listed on page 167.

(Cross Reference Page 91a) Digitized by GOGGIC

#### CONDULET BODIES—SE SERIES

## TYPES SE, SEC, SEL, SET AND SEX

Take Key, Keyless or Pull Receptacles; Rosettes; Pull Switch Rosettes, or Pull Switches Enumerated Below



SE2	SE3
50	25
lbs. 115 lbs.	
	lbs. 115 lbs. 80 \$ .90



With Receptacle Mounted Prices do not include Receptacle

#### TYPE SEC CONDULET BODIES—Black Enamel Finish

Size in inches	1/2	3/4	1
Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	75 165 lbs.	SEC22 50 125 lbs. \$1.05	SEC33 25 75 lbs. \$1.25



#### TYPE SEL CONDULET BODIES-Black Enamel Finish

Size in inches	1/2	3/4	1
Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	75 165 lbs.	SEL22 50 125 lbs. \$1.05	SEL33 25 75 lbs. \$1.25



#### TYPE SET CONDULET BODIES-Black Enamel Finish

Size in inches	1/2	3/4	1
Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	75 180 lbs.	SET222 50 140 lbs. \$1.15	SET333 25 80 lbs, \$1.35



#### TYPE SEX CONDULET BODIES-Black Enamel Finish

Size in inches	1/2	3/4	1
Catalogue Number	SEX1111	SEX2222	SEX3333
	75	50	25
	200 lbs.	155 lbs.	90 lbs.
	\$1.15	\$1.25	\$1.45

We will furnish fittings for condulet bodies listed above.

Condulet bodies listed above take the following:

Receptacles, Key: ARROW E-4045, 7513, 7513W, 7536, 7536W, 8044, 8044W, 8080, 8080W. BRYANT-4045, 4513, 4536, 7513, 7536, all BL and BN bases. G. E. CO.—GE052, GE278, GE281, GE418, GE483, GE495. HUBBELL-3070, 3156, 3316, 3752. PAISTE-5473, 5476, 5569, 5571. P. & S.—7, 46, 814.

Receptacles, Keyless: ARROW E-40, 41, 85, 109, 4046, 7514, 7537, 8045, 8081, 62357, 103704. BRYANT-4031, 4046, 7514, 7537, 62357, all BL and BN bases. G. E. CO.—GE055, GE096, GE155, GE279, GE494, GE496, 62357. HUBBELL—3071, 3754. PAISTE—5474, 5477, 5570, 5572. P. & S.—1, 4, 40, 41, 85, 109, 62357, 103704.

Receptacles, Pull: ARROW E-4047, 4515, 4537, 8522, 8537. BRYANT-4047, 4515, 4537, all BL and BN bases. G. E. CO.—GE280, 88964. HUBBELL-3069, 3083, 3750, 3841. PAISTE-5475, 5478, 5587, 5588, P. & S.—128.

Rosettes: ARROW E-368, 369, 457, 525, 8074, 8075. BRYANT-368, 369, 457, all BL and BN bases. P. & S.-113, 199, 723, 1172, 1174.

Rosettes, Pull Switch: ARROW E-176, 179, 8605, 8608. BRYANT-All BL and BN bases. HUBBELL-5906, 5926, 5996, 6007, P. & S.-700.

Switches, Pull: ARROW E-174, 175, 177, 178, 8603, 8604, 8606, 8607. BRYANT-All BL and BN bases.

(Cross Reference Page 91b

#### CONDULET BODIES—S SERIES

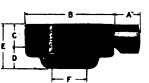
## TYPES S, SA AND SC

For Pony Receptacles, Clamp Receptacles and Rosettes, and Hubbell Polarity Plug Receptacle 5757

Furnished with Fastening Straps for Fittings and all necessary Screws



Type SC ring Pony Receptacle Mounted (Broken-away View)



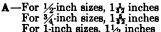
Dimensional Drawing for S Series of Condulets



Type SC Showing Crouse-Hinds Clamp Receptacle, without Shade Holder Groove, Mounted (Broken-away View)



Type SX Showing Crouse-Hinds Clamp Cord Rosette Mounted



For ¾-inch sizes, 1½ inches
For 1-inch sizes, 1½ inches
B—For all sizes, 3¾ inches
C—For all sizes, ¾-inch
D—For all sizes, 1½ inches
E—For all sizes, 1¼ inches
F—For type OO cover, 1⅓ inches
For type OOK cover, 1¾ inches



Type SL Showing Hubbell Polarity Plug Receptacle 5757 Mounted

•	100

TYPE S CONDULET BODIES—Black Enamel Pinish					
Size in inches	1/2	3/4	1		
Catalogue Number	1100	S2 75 110 lbs. \$ .75	S3 25 50 lbs. \$ .90		



TIPE SA CONDULET BODIES—Black Enamel Finish					
Size in inches	1/2	3/4	1		
Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	100	SA2 75 110 lbs.	SA3 25 50 lbs. \$ .90		

WITH OA COMPHIEM BODIES BLOKE



TYPE SC CONDULET BODIES—Black Enamel Finish					
Size in inches	1/2	3/4	1		
Catalogue Number Standard Package. Shipping Weight Std. Pkg. List Price, each	100	SC22 75 135 lbs. \$ .85	SC33 25 65 lbs. \$1.05		

Fittings for use with Condulets of the S series are not included in above list prices, but are enumerated on opposite page.

For finishes and assortments, see note on page 91.

Conduletto clamp receptacles and rosettes, for use with Condulets of the S series, are listed on page 190. Condulet reducers are listed on page 171.

Listings of the 8 series of Condulet bodies are continued on page 95zed by

## CONDULET BODIES—S SERIES—Continued TYPES SL, ST AND SX

For Pony Receptacles, Clamp Receptacles and Rosettes, and Hubbell Polarity Plug Receptacle 5757

Furnished with Fastening Straps for Fittings and all necessary Screws

	TYPE SL CONDULET BO	DIES—Bla	ick Enamel F	3/4 1 SL22 SL33 5 25 135 lbs. 65 lbs.				
	Size in inches		3/4	1				
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	SL11· 100 160 lbs. \$ .80	SL22 75 135 lbs. \$ .85	25				
	TYPE ST CONDULET BODIES—Black Enamel Finish							
	Size in inches	1/2	3/4	1				
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	ST111 100 170 lbs. \$ .90	ST222 75 140 lbs. \$1.00	ST333 25 70 lbs. \$1.20				
	TYPE SX CONDULET BO	DIES—B1	ack Enamel F	inish				
	Size in inches	1/2	3/4	1				
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	100 210 lbs.	SX2222 75 180 lbs. \$1.10	SX3332 25 80 lbs. \$1.35				

#### COVERS FOR TYPES S, SA, SC, SL, ST AND SX CONDULET BODIES—Black Enamel Finish. For 1-2, 3-4 and 1-inch Condulet Bodies

•	For Rec		For H Plug		Style	Blank	Metal	
	Sheet Steel	Cast Iron	Sheet Steel	Cast Iron	Cover	Sheet Steel	Cast Iron	
	00 100 50 lbs. \$ .12	00g 100 50 lbs. \$ .35		100 40 lbs.	Catalogue NoStandard PkgWeight Std. PkgList Price, each	100 70 lbs.		

Fittings for use with Condulets of the S series are not included in above list prices, but are as follows:

Pony Receptacles: ARROW E—28795, 50715. BRYANT—28795, 50715. G. E. CO.—11221, 28795, 50715

PAISTE—28795, 50715. P. & S.—61870.

Clamp Receptacles and Rosettes: CONDULETTO (Crouse-Hinds)—C337G, C337, C442, C448, C449. ARROW E—8100, 59108. BRYANT—59108, 61988. F. BEDERAL—303, 304, 305. G. E. CO.—105001. PAISTE—59439, 61988. P. & S.—61877, 61988, 102703.

Polarity Plug Receptacle: HUBBELL—5757.

Types 00 and 00g covers have openings 1½ inches in diameter. Types 00k and 00kg covers have openings 1½ inches in diameter.

openings 133 inches in diameter.

Proper fastening screws are furnished with covers, and are so held in screw holes that they can not fall out

#### For finishes, see note on page 91.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. Black enameled and galvanized covers of all three styles may be assorted to make up a standard package. No other assortments are allowed.

Standard package discount is allowed on covers when an order is for a standard package of Condulet bodies and an equal number of covers for those bodies; but on an order for covers alone, standard package discount is allowed, only, on the specified standard package quantity for those covers.

Conduletto clamp receptacles and rosettes, for use with Condulets of the S series, are listed on page 190. Condulet reducers are listed on page 171. Digitized by GOOGIC

#### CONDULETS-V SERIES

## TYPES V, VA AND VC-Iron

Vapor, Gas and Dust-Proof—Take any Regular Mazda Lamp up to and Including 40-Watt, or any Lamp with Dimensions not Exceeding 23/4x51/4 Inches

Furnished with Crouse-Hinds Receptacle CCV337, Sealing Plate, Gaskets and all necessary Fastening Screws, and with or without Globe and Guard



For marine work and in breweries, refineries, flour mills or wherever there is dampness, gas or fine dust, Condulets of the V series meet every requirement.

These Condulets remain vapor, gas and dust-proof even though globes be broken or removed for lamp renewals.

Crouse-Hinds receptacle CCV337 is the only receptacle that can be mounted in these Condulets.

	Size in inches	1/2	3/4	1
Complete	Catalogue Number Standard Package Weight Std. Pkg List Price, each	35 230 lbs.	V289 25 180 lbs. \$4.55	V389 10 100 lbs. \$4.60
Complete, except Globe and Guard	Catalogue Number Standard Package Weight Std. Pkg List Price, each	35 125 lbs.	V2 25 100 lbs. \$1.95	V3 10 50 lbs. \$2.00

Type V (Padlock not included in list prices)

#### TYPE VA CONDULETS-IRON-Black Enamel Finish



	Size in inches	1/2	3/4	1
Complete	Catalogue Number Standard Package Weight Std. Pkg List Price, each	35 230 lbs.	VA289 25 180 lbs. \$4.55	VA389 10 100 lbs. \$4.60
Complete, except Globe and Guard	Catalogue Number Standard Package Weight Std. Pkg List Price, each	35 125 lbs.	VA2 25 100 lbs. \$1.95	VA3 10 50 lbs. \$2.00

#### TYPE VC CONDULETS-IRON-Black Enamel Finish



·	Size in inches	1/2	3/4	1
Complete	Catalogue Number Standard Package Weight Std. Pkg List Price, each	35 250 lbs.	VC2289 25 190 lbs. \$4.70	VC3389 10 110 lbs. \$4.80
Complete, except Globe and Guard	Catalogue Number Standard Package Weight Std. Pkg List Price, each	35   135 lbs.	VC22 25 110 lbs. \$2.10	VC33 10 60 lbs. \$2.20

For finishes, assortments and other important information, see note on opposite page. Condulet reducers are listed on page 171.

Condulets of the V series are listed on pages 98 to 101, inclusive, and pages 106 to 109, inclusive.

(Cross Reference Page 98)

#### CONDULETS-V SERIES-Continued

## TYPES VL, VT AND VX—Iron

Vapor, Gas and Dust-Proof-Take any Regular Mazda Lamp up to and Including 40-Watt, or any Lamp with Dimensions not Exceeding 23/4 x 51/4 Inches

Furnished with Crouse-Hinds Receptacle CCV337, Sealing Plate, Gaskets and all necessary Fastening Screws, and with or without Globe and Guard

TYPE VL CONDULETS—IRON—Black Enamel Finish						
	Size in inches	1/2	3/4	1		
Complete	Catalogue Number Standard Package Weight Std. Pkg List Price, each		VL2289 25 190 lbs. \$4.70	VL3389 10 110 lbs. \$4.80		
Complete, except Globe and Guard	Catalogue Number Standard Package Weight Std. Pkg. List Price, each	VL11 35 135 lbs. \$2.00	VL22 25 110 lbs. \$2.10	VL33 10 60 lbs. \$2.20		
TY	PE VT CONDULETS—IR	ON-Black	Enamel Finis	sh		
	Size in inches	1/2	3/4	1 .		
Complete	Catalogue Number Standard Package Weight Std. Pkg List Price, each	VT11189 35 255 lbs. \$4.75	VT22289 25 195 lbs. \$4.85	VT33389 10 115 lbs. \$5.05		
Complete, except Globe and Guard	Catalogue Number Standard Package Weight Std. Pkg List Price, each	VT111 35 140 lbs. \$2.15	VT222 25 120 lbs. \$2.25	VT333 10 70 lbs. \$2.45		
TY	PE VX CONDULETS—IR	ON-Black	Enamel Fini	sh		
	Size in inches	1/2	3/4	1		
Complete	Catalogue Number Standard Package Weight Std. Pkg List Price, each	VX111189 35 265 lbs. \$4.85	VX222289 25 200 lbs. \$5.05	VX333389 10 120 lbs. \$5.20		
Complete, except Globe and Guard	Catalogue Number Standard Package Weight Std. Pkg List Price, each		VX2222 25 130 lbs. \$2.45	VX3333 10 80 lbs. \$2.60		

Important Information Concerning Condulets Listed on This and the Opposite Page

Clear globes are regularly furnished on orders for complete Condulets.

Colored globes will be furnished with Condulets of the V series, if specifically ordered, at the following increases over list prices for complete Condulets: Opal, \$.30; green, blue or orange, \$.90; ruby, \$1.55. Globes and guards for Condulets of the V series are made in one size only.

Padlock is not included in prices for Condulets of the V series, but is listed on page 175, and

will be furnished, if specifically ordered.

Finishes: Black enamel is the standard finish for Condulets, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulets will be furnished at same price as for all black enamel finish, when the order specifies galvanized finish. For special plated finishes, see page 182. For cast bronze Condulets, plain and with special finishes, see page 182. For aluminum Condulets, plain and with black enamel finish, see page 182. Prices for cast brass Condulets, marine finish, scheduled on page 182, do not apply to Condulets of the V and VH series. Prices for these Condulets in brass, marine finish, will be quoted upon request.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Globes are listed separately on page 173. Guards are listed separately on page 173. Sealing plate is listed separately on page 173. Gaskets are listed separately on page 176. Condulet reducers are listed on page 171.

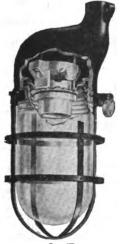
Condulets of the V series are listed on pages 98 to 101, inclusive.

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# TYPES VE, VF AND VD-Iron

Vapor, Gas and Dust-Proof—Take any Regular Mazda Lamp up to and Including 40-Watt, or any Lamp with Dimensions not Exceeding 234 x 51/4 Inches

Purnished with Crouse-Hinds Receptacle CCV337, Sealing Plate, Gaskets and all necessary Pastening Screws, and with or without Globe and Guard



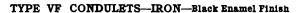
Type VE (Padlock not included in list prices) For marine work and in breweries, refineries, flour mills or wherever there is dampness, gas or fine dust, Condulets of the V series meet every requirement.

These Condulets remain vapor, gas and dust-proof even though globes be broken or removed for lamp renewals.

Crouse-Hinds receptacle CCV337 is the only receptacle that can be mounted in these Condulets.

TYPE VE	CONDULETS-IRON-Black Enamel Finish
---------	------------------------------------

	Size in inches	1/2	3/4	1
Complete	Catalogue Number	VE189	VE289	VE389
	Standard Package	35	25	10
	Weight Std. Pkg	250 lbs.	190 lbs.	100 lbs.
	List Price, each	\$4.75	\$4.85	\$4.95
Complete,	Catalogue Number	VE1	VE2	VE3
except	Standard Package	35	25	10
Globe and	Weight Std. Pkg	135 lbs.	110 lbs.	50 lbs.
Guard	List Price, each	\$2.15	\$2.25	\$2.35





	Size in inches	1/2	3/4	1
Complete	Catalogue Number Standard Package Weight Std. Pkg List Price, each	VF189 35 260 lbs. \$4.90	VF289 25 200 lbs. \$5.00	VF389 10 105 lbs. \$5.10
Complete, except Globe and Guard	Catalogue Number Standard Package Weight Std. Pkg List Price, each	VF1 35 145 lbs. \$2.30	VF2 25 120 lbs. \$2.40	VF3 10 55 lbs. \$2.50

#### TYPE VD CONDULETS—IRON—Black Enamel Finish



	Size in inches	1/2	3/4	1
Complete	Catalogue Number	VD1189	VD2289	VD3389
	Standard Package	35	25	10
	Weight Std. Pkg	275 lbs.	210 lbs.	110 lbs.
	List Price, each	\$5.15	\$5.25	\$5.35
Complete,	Catalogue Number	VD11	VD22	VD33
except	Standard Package	35	25	10
Globe and	Weight Std. Pkg	160 lbs.	130 lbs.	60 lbs.
Guard	List Price, each	\$2.55	\$2.65	\$2.75

For finishes, assortments and other important information, see note on opposite page. Condulet reducers are listed on page 171.

Condulets of the V series are listed on pages 98 to 101, inclusive.

# TYPES VK, VP AND VI-Iron

Vapor, Gas and Dust-Proof-Take any Regular Mazda Lamp up to and Including 40-Watt, or any Lamp with Dimensions not Exceeding 23/4 x 51/4 Inches

Purnished with Crouse-Hinds Receptacle CCV337, Sealing Plate, Gaskets and all necessary Fastening Screws, and with or without Globe and Guard

TYP	E VK CONDULETS—IROI	N—Black	Enamel Fir	nish
- Tage	Size in inches	1/2	3/4	1
Complete	Catalogue Number	VK189 35 260 lbs. \$4.90	VK289 25 200 lbs. \$5.00	VK389 10 105 lbs. \$5.10
Complete, except Globe and Guard	Catalogue Number	VK1 35 145 lbs. \$2.30	VK2 25 120 lbs. \$2.40	VK3 10 55 lbs. \$2.50
TYP	E VP CONDULETS—IRO	N—Black	Enamel Fir	nish
	Size in inches	1/2	3/4	1
Complete	Catalogue Number Standard Package Shipping Weight Std. Pkg List Price, each	VP189 35 260 lbs. \$4.90	VP289 25 200 lbs. \$5.00	VP389 10 105 lbs. \$5.10
Complete, except Globe and Guard	Catalogue Number Standard Package Shipping Weight Std. Pkg List Price, each		VP2 25 120 lbs. \$2.40	VP3 10 55 lbs. \$2.50
TYP	PE VJ CONDULETS—IRON	W—Black I	Inamel Fin	ish
	Size in inches	1/2	3/4	1
Complete	Catalogue Number Standard Package Shipping Weight Std. Pkg List Price, each	VJ1189 35 280 lbs. \$5.15	VJ2289 25 210 lbs. \$5.25	VJ3389 10 110 lbs. \$5.35
Complete, except Globe and Guard	Catalogue Number	VJ11 35 165 lbs. \$2.55	VJ22 25 · 130 lbs. \$2.65	VJ33 10 60 lbs. \$2.75

Important Information Concerning Condulets Listed on This and the Opposite Page Clear globes are regularly furnished on orders for complete Condulets.

Colored globes will be furnished with Condulets of the V series, if specifically ordered, at the following increases over list prices for complete Condulets: Opal, \$30; green, blue or orange, \$.90; ruby, \$1.55

Globes and guards for Condulets of the V series are made in one size only.

Padlock is not included in prices for Condulets of the V series, but is listed on page 175, and

will be furnished, if specifically ordered.

Finishes: Black enamel is the standard finish for Condulets, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulets will be furnished, at same price as for all black enamel finish, when the order specifies galvanized finish. For special plated finishes, see page 182. For cast bronze Condulets, plain and with special finishes, see page 182. For aluminum Condulets, plain and with black enamel finish, see page 182. Prices for cast brass Condulets, marine finish, scheduled on page 182, do not apply to Condulets of the V and VH series. Prices for these Condulets in brass, marine finish, will be quoted upon request.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Globes are listed separately on page 173. Guards are listed separately on page 173. Sealing plate is listed separately on page 176. Condulet reducers are listed on page 171. Digitized by Google

Condulets of the V series are listed on pages 98 to 101, inclusive.

#### CONDULETS-VH SERIES

# TYPES VH, VHA AND VHC-Iron

Vapor, Gas and Dust-Proof—Take any Regular Mazda Lamp up to and Including 100-Watt, or any Lamp with Dimensions not Exceeding 33/4 x 73/4 Inches

Furnished with Crouse-Hinds Receptacle CCV337, Sealing Plate, Gaskets and all necessary
Fastening Screws, and with or without Globe and Guard



Type VH (Padlock not included in list prices)

For marine work and in breweries, refineries, flour mills or wherever there is dampness, gas or fine dust, Condulets of the VH series meet every requirement.

These condulets remain vapor, gas and dust-proof even though globes be broken or removed for lamp renewals.

Crouse-Hinds receptacle CCV337 is the only receptacle that can be mounted in these Condulets.

	Size in inches	1/2	3/4	1
Complete	Catalogue Number	VH189	VH289	V H389
	Standard Package.	35	25	10
	Ship. Wt. Std. Pkg.	285 lbs.	220 lbs.	120 lbs.
	List Price, each	\$5.40	\$5.45	\$5.50
Complete,	Standard Package.	VH1	VH2	VH3
except		35	25	10
Globe and		135 lbs.	110 lbs.	60 lbs.
Guard		\$2.35	\$2.40	\$2.45



#### TYPE VHA CONDULETS-IRON-Black Enamel Finish

	Size in inches	1/2	3/4	1
Complete	Catalogue Number	VHA189	VHA289	VHA389
	Standard Package.	35	25	10
	Ship. Wt. Std. Pkg.	285 lbs.	220 lbs.	120 lbs.
	List Price, each	\$5.40	\$5.45	\$5.50
Complete,	Catalogue Number	VHA1	VHA2	VHA3
except	Standard Package.	35	25	10
Globe and	Ship. Wt. Std. Pkg.	135 lbs.	110 lbs.	60 lbs.
Guard	List Price, each	\$2.35	\$2.40	\$2.45



# TYPE VHC CONDULETS-IRON-Black Enamel Finish

	Size in inches	1/2	3/4	1
Complete	Catalogue Number	VHC1189	VHC2289	VHC3389
	Standard Package.	35	25	10
	Ship. Wt. Std. Pkg.	295 lbs.	230 lbs.	125 lbs.
	List Price, each	\$5.50	\$5.60	\$5.65
Complete,	Standard Package.	VHC11	VHC22	VHC33
except		35	-25	10
Globe and		145 lbs.	120 lbs.	65 lbs.
Guard		\$2,45	\$2.55	\$2.60

For finishes, assortments and other important information, see note on opposite page. Condulet reducers are listed on page 171.

Condulets of the VH series are listed on pages 102 to 105, inclusive, and pages 110 to 113, inclusive.

# CONDULETS-VH SERIES-Continued TYPES VHL, VHT AND VHX-Iron

Vapor, Gas and Dust-Proof—Take any Regular Mazda Lamp up to and Including 100-Watt, or any Lamp with Dimensions not Exceeding 33/4 x 73/4 Inches
Furnished with Crouse-Hinds Receptacle CCV337, Sealing Plate, Gaskets and all necessary
Fastening Screws, and with or without Globe and Guard



	Size in inches	1/2	3/4	1
Complete	Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	35 295 lbs.	VHL2289 25 220 lbs. \$5.60	VHL3389 10 120 lbs. \$5.65
Complete, except Globe and Guard	Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	35 140 lbs.	VHL22 25 110 lbs. \$2.55	VHL33 10 60 lbs. \$2.60



#### TYPE VHT CONDULETS-IRON-Black Enamel Finish

	Size in inches	1/2	3/4	1
Complete	Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	35 305 lbs.	VHT22289 25 230 lbs. \$5.75	VHT33389 10 125 lbs. \$5.85
Complete, except Globe and Guard	Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	35 150 lbs.	VHT222 25 120 lbs. \$2.70	VHT333 10 65 lbs. \$2.80



# TYPE VHX CONDULETS-IRON-Black Enamel Finish

	Size in inches	1/2	3/4	1
Complete	Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	310 lbs.	VHX222289 25 240 lbs. \$5.90	VHX333389 10 130 lbs. \$6.05
Complete, except Globe and Guard	Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	35 160 lbs.	VHX2222 25 130 lbs. \$2.85	VHX3333 10 70 lbs. \$3.00

Important Information Concerning Condulets Listed on This and the Opposite Page Clear globes are regularly furnished on orders for complete Condulets.

Colored globes will be furnished with Condulets of the VH series, if specifically ordered, at the

following increases over list prices for complete Condulets: opal, \$.90; green, blue or orange, \$1.55; ruby, \$2.10.
Globes and guards for Condulets of the VH series are made in one size only.

Padlock is not included in prices for Condulets of the VH series, but is listed on page 175, and

will be furnished, if specifically ordered.

Finishes: Black enamel is the standard finish for Condulets, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulets will be furnished, at same price as for all black enamel finish, when the order specifies galvanized finish. For special plated finishes, see page 182. For cast bronze Condulets, plain and with special finishes, see page 182. For aluminum Condulets, plain and with black enamel finish, see page 182. Prices for cast bronze Condulets, married, plain and with black enamel finish, see page 182. Prices for cast bronze Condulets, married, plain and with black enamel finish, see page 182. Prices for cast bronze Condulets, married, plain and with black enamel finish, see page 182. Prices for cast bronze Condulets, married, plain and with black enamel finish, see page 182. Prices for cast bronze Condulets, married for the conductor of the conducto rine finish, scheduled on page 182, do not apply to Condulets of the V and VH series. Prices for these Condulets in brass, marine finish, will be quoted upon request.

Black enameled and galvanized Condulets of the same type and size may be assorted to make

up a standard package. No other assortment is allowed.

Globes are listed separately on page 173. Guards are listed separately on page 173. Sealing plate is listed separately on page 173. Gaskets are listed separately on page 176. Condulet reducers are listed on page 171. Digitized by GOOGLE

Condulets of the VH series are listed on pages 102 to 105, inclusive.

# CONDULETS—VH SERIES—Continued TYPES VHE, VHF AND VHD—Iron

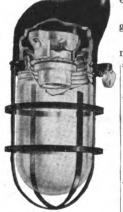
Vapor, Gas and Dust-Proof—Take any Regular Mazda Lamp up to and Including 100-Watt, or any Lamp with Dimensions not Exceeding 3¾ x 7¾ Inches

Furnished with Crouse-Hinds Receptacle CCV337, Sealing Plate, Gaskets and all necessary Eastening Screws, and with or without Globe and Guard

For marine work and in breweries, refineries, flour mills or wherever there is dampness, gas or fine dust, Condulets of the VH series meet every requirement.

These Condulets remain vapor, gas and dust-proof even though globes be broken or removed for lamp renewals.

Crouse-Hinds receptacle CCV337 is the only receptacle that can be mounted in these Condulets.



Type VHE (Padlock not included in list prices)

## TYPE VHE CONDULETS—IRON—Black Enamel Finish

de Via	Size in inches	1/2	3/4	1
Complete	Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	35 335 lbs.	VHE289 25 260 lbs. \$5.60	VHE389 10 130 lbs. \$5.70
Complete, except Globe and Guard	Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	35 185 lbs.	VHE2 25 150 lbs. \$2.55	VHE3 10 70 lbs. \$2.65



#### TYPE VHF CONDULETS-IRON-Black Enamel Finish

	Size in inches	1/2	3/4	1
Complete	Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	35 335 lbs.	VHF289 25 260 lbs. \$5.85	VHF389 10 130 lbs. \$5.95
Complete, except Globe and Guard	Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	35 185 lbs.	VHF2 25 150 lbs. \$2.80	VHF3 10 70 lbs. \$2.90



## TYPE VHD CONDULETS-IRON-Black Enamel Finish

77	Size in inches	1/2	3/4	1
Complete	Catalogue Number	VHD1189	VHD2289	VHD3389
	Standard Package	35	25	10
	Ship. Wt. Std. Pkg	350 lbs.	270 lbs.	140 lbs.
	List Price, each	\$5.90	\$6.00	\$6.10
Complete,	Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	VHD11	VHD22	VHD33
except		35	25	10
Globe and		200 lbs.	160 lbs.	80 lbs.
Guard		\$2.85	\$2.95	\$3.05

For finishes, assortments and other important information, see note on opposite page. Condulet reducers are listed on page 171.

Condulets of the VH series are listed on pages 102 to 105, inclusive lightized by

# CONDULETS-VH SERIES-Continued TYPES VHK, VHP AND VHJ-Iron

Vapor, Gas and Dust-Proof—Take any Regular Mazda Lamp up to and Including 100-Watt, or any Lamp with Dimensions not Exceeding 33/4 x 73/4 Inches

Furnished with Crouse-Hinds Receptacle CCV337, Sealing Plate, Gaskets and all necessary Fastening Screws, and with or without Globe and Guard

Or	T	YPE VHK CONDULETS	S—IRON—BI	ack Enamel I	inish
SWEHE:		Size in inches	1/2	3/4	1
	Complete	Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	VHK189 35 370 lbs. \$5.75	VHK289 25 290 lbs. \$5.85	VHK389 10 150 lbs. \$5.95
	Complete, except Globe and Guard	Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	VHK1 35 220 lbs. \$2.70	VHK2 25 180 lbs. \$2.80	VHK3 10 90 lbs. \$2.90
	T	YPE VHP CONDULETS	S—IRON—B1	ack Enamel F	inish
th worth		Size in inches	1/2	3/4	1
	Complete	Catalogue Number Ståndard Package Ship. Wt. Std. Pkg List Price, each	VHP189 35 370 lbs. \$5.75	VHP289 25 290 lbs. \$5.85	VHP389 10 150 lbs. \$5.95
	Complete, except Globe and Guard	Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	VHP1 35 220 lbs. \$2.70	VHP2 25 180 lbs. \$2.80	VHP3 10 90 lbs. \$2.90
	T	YPE VHJ CONDULETS	S—IRON—B1	ack Enamel F	inish
		Size in inches	1/2	3/4	1
Compl	Complete	Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	VHJ1189 35 375 lbs. \$5.90	VHJ2289 25 295 lbs. \$6.00	VHJ3389 10 155 lbs. \$6.10
3	Complete, except Globe and Guard	Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	VHJ11 35 225 lbs \$2.85	VHJ22 25 185 lbs. \$2,95	VHJ33 10 95 lbs. \$3.05

Clear globes are regularly furnished on orders for complete Condulets.

Colored globes will be furnished with Condulets of the VH series, if specifically ordered, at the following increases over list prices for complete Condulets: opal, \$.90; green, blue or orange, \$1.55; ruby, \$2.10.

Globes and guards for Condulets of the VH series are made in one size only.

Padlock is not included in prices for Condulets of the VH series, but is listed on page 175.

Finishes: Black enamel is the standard finish for Condulets, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulets will be furnished, at same price as for all black enamel finish when the order specifies galvanized finish. For special plated finishes, see page 182. For cast bronze Condulets, plain and with special finishes, see page 182. For aluminum Condulets, plain and with black enamel finish, see page 182. Prices for cast brass Condulets, plain and with black enamel finish, see page 182. Prices for cast brass Condulets, plain and with black enamel finish, see page 182. lets, marine finish, scheduled on page 182, do not apply to Condulets of the V and VH series. Prices for these Condulets in brass, marine finish, will be quoted upon request.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Receptacle CCV337 is listed separately on page 194. Globes and Guards are listed separately on page 173. Sealing plate is listed separately on page 173. Gaskets are listed separately on page 176. Padlock is listed on page 175. Condulet reducers are listed on page 171. Condulets of the VH series are listed on pages 102 to 105, inclusive, and pages 110 to 113, inclusive

# TYPES GV, GVA, GVL AND GVLA WEATHER-PROOF CONDULETS

Furnished with Receptacle C337, Receptacle and Guard Holder RMP2 and Guard HV94\* Take any Incandescent Lamp not Exceeding 2 75 x 31 Inches Not Designed to Take Glass Sealing-Globe



Condulets of the GV and HV series are weather-proof and semivapor-proof lamp fittings, and can be used to advantage wherever conditions are not so severe as to require an outer sealing globe. They are thoroughly gasketed and are in every way suitable for such places as laundries, kitchens, interior installations on boats and in subways.

The guard effectually protects the lamp from breakage and, when padlocked on, also prevents the unauthorized removal or theft of lamp.

TYPE GV CO	NDULE'	TS—Comp	olete	TYP	E GV	A CONDULETS—Con	iple
	Size		Black E	nameled	Size	49473	
	1½- inch				½- inch	GVA1204 35 145 lbs. \$3.20	
	3/4- inch	GV2204 25 115 lbs. \$3.05	.Std. P .Wt. Ste		3/4- inch	GVA2204 25 120 lbs. \$3.30	
	1- inch	GV3204 10 55 lbs. \$3.30	Catalogue No Std. Package Wt. Std. Pkg List, each		1- inch	GVA3204 10 60 lbs. \$3.60	-
TYPE GVL CO	NDULE	TS—Com	plete	TYP	E GVI	A CONDULETS—Con	npl
TOTAL AND THE	Size		Black E	nameled	Size	4.00	D
	½- inch	GVL1204 35 140 lbs. \$3.05	Catalogue No Std. Package Wt. Std. Pkg		½- inch	GVLA1204 35 145 lbs. \$3.20	
1	3/4- inch	GVL2204 25 115 lbs. \$3.15	.Std. P .Wt. Std	ackage.	3/4- inch	GVLA2204 25 120 lbs. \$3.30	
	1- inch	GVL3204 10 55 lbs. \$3.45	.Std. P .Wt. Std	ackage.	1- inch	GVLA3204 10 60 lbs. \$3.60	

\*See footnote on opposite page.

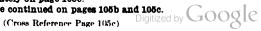
Receptacle C337 is listed separately on page 190.

Receptacle and Guard Holder RMP2 is listed separately on page 105c.

Guards HV94 and HV96 are listed separately on page 105c.

Listings of Weather-Proof Condulets are continued on pages 105b and 105c.





# TYPES GVT, GVTA, GVX, GVXA, HV AND HVA WEATHER-PROOF CONDULETS

Furnished with Receptacle C337, Receptacle and Guard Holder RMP2 and Guard HV94\* Take any Incandescent Lamp not Exceeding 2, x 3; Inches Not Designed to Take Glass Sealing-Globe

E GVT CONDUL	ETS—Com	plete	TYP	E GV	TA CONDULETS—Co	mple
Size		Black E	nameled	Size		5
inch	GVT1204 35 145 lbs. \$3.20	.Catalog .Std. P .Wt. Std List,	ackage. l. Pkg	½- inch	GVTA1204 35 150 lbs. \$3.35	Sellin.
3/4- inch	GVT2204 25 120 lbs. \$3.30	.Catalog .Std. P .Wt. Std List,	ackage. I. Pkg	3/4- inch	GVTA2204 25 125 lbs. \$3.50	
1- inch	GVT3204 10 60 lbs. \$3.60	.Catalog .Std. P .Wt. Std List,	ackage. l. Pkg	1- inch	GVTA3204 10 65 lbs. \$3.90	1
E GVX CONDUL	ETS-Com	plete	TYP	E GV	XA CONDULETS—Co	mpl
Size		Black E	nameled	Size		3
inch	GVX1204 35 150 lbs. \$3.35	.Catalog .Std. P .Wt. Std List,	ackage. l. Pkg	½- inch	GVXA1204 35 155 lbs. \$3.50	
3/4- inch	GVX2204 25 125 lbs. \$3.50	.Catalog .Std. P .Wt. Std List,	ackage. I. Pkg	3/4- inch	GVXA2204 25 130 lbs. \$3.70	
1- inch	GVX3204 10 65 lbs. \$3.90	.Catalog .Std. P .Wt. Std List,	ackage. l. Pkg	1- inch	GVXA3204 10 70 lbs. \$4.10	L
E HV CONDUL	ETS-Comp	olete	TYP	E HV	A CONDULETS—Con	nple
Size		Black En	nameled	Size		
inch	HV1204 35 135 lbs. \$2.90	.Catalog .Std. P .Wt. Std List,	ackage. l. Pkg	½- inch	HVA1204 35 135 lbs. \$2.95	- COLUMN
3/4- inch	HV2204 25 110 lbs. \$2.95	.Catalog .Std. P .Wt. Std List,	ackage. I. Pkg.	3/4- inch	HVA2204 25 110 lbs. \$3.00	
1- inch	HV3204 10 50 lbs. \$3.20	.Catalog .Std. P .Wt. Std List,	ackage. l. Pkg	1- inch	HVA3204 10 50 lbs. \$3.30	

\*If specified on order, Guard HV96, instead of Guard HV94, will be furnished with Condulets of the GV and HV series, at an advance of \$0.10 in list prices. Guard HV96 takes any incandescent lamp not exceeding 21/16 x 51/4 inches.

Receptacle C337 is listed separately on page 190.

Receptacle and Guard Holder RMP2 is listed separately on page 105c. separately on page 105c.

Listings of Weather-Proof Condulets are continued on page 105c



Guards HV94 and HV96 are listed

# TYPES HHV, HHVC AND HVLA WEATHER-PROOF CONDULETS

Furnished with Receptacle C337, Receptacle and Guard Holder RMP2 and Guard HV94\*
Take any Incandescent Lamp not Exceeding 2 176 x 2 1 Inches
Not Designed to Take Glass Sealing-Globe

TYPE HHV CO	TYPE HHV CONDULETS—Complete TYPE HHVC COI					HVC CON	DULETS — Complete
	Size		Black En	ameled	Size		
	½- inch	HHV1204 35 140 lbs. \$3.00	.Catalogu .Std. Pa .Wt. Std. List, e	ckage. Pkg.	½- inch	HHVC12 35 145 lbs. \$3.20	04
	¾- inch	HHV2204 25 115 lbs. \$3.05	1 ~		¾- inch	HHVC22 25 120 lbs. \$3.30	04
<b>A</b>	1- inch	HHV3204 10 55 lbs. \$3.30	.Catalogu .Std. Pa .Wt. Std. List, e	ckage. Pkg	1- inch	HHVC32 10 60 lbs. \$3.60	04
TYPE HVLA CONDULETS—Complete RECEP. AND GUARD HOLDER RMP2						RD HOLDER RMP2	
	Size		1	Enamel ish	HV	Series, liste	oof Condulets of GV and ed on pages 26, 27 and 28 ith Gasket and Screws
	½- inch	HVLA1204 35 140 lbs. \$3.05	.Catalog .Std. F .Wt. St List,	ackage. d. Pkg.	35 30 l	bs.	0
	¾- inch	HVLA2204 25 115 lbs. \$3.15	Std. F	d. Pkg	Fo H	rm 20 Conseries, prov	can be mounted on any dulet body of the G and vided holes for four No. re drilled and tapped in
	1- inch	HVLA3204 10 55 lbs. \$3.45	Catalogous Std. F. Wt. St	ackage. d. Pkg.	the Co	erim of the ndulet bod	Condulet body. When y is so used, the adjustaned with it is not needed.
<b>R</b>			TYPE HV e Receptacl Black			lolder	<b>A</b>
		HV94 35 30 lbs. \$1.40	Std. F .Wt. St	gue No. Package d. Pkg. each	35 35 l	bs.	

If specified on order, Guard HV96, instead of Guard HV94, will be furnished with Condulets of the GV and HV series, at an advance of \$0.10 in list price. Guard HV96 takes any incandescent lamp not exceeding 27/16 x 51/4 inches.

Finishes: Black enamel is the standard finish for Condulets, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulets will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, cast brass and cast bronze Condulets with plain and special finishes, aluminum Condulets with plain and black enamel finish, see page 182.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Receptacle C337 is listed separately on page 190. Weather-Proof Condulets are listed on pages 105a, 105b and 105c.

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# MIDGET GUARD EQUIPMENT

For Forms 5 and 10 Condulet Bodies of G and H Series
Furnished Complete with Guard HGV95. Receptacle and Guard Holder RMP3.

Keyless Receptacle PE55 and all necessary Screws\*

Takes any Incandescent Lamp not Exceeding 2; x3; Inches

Not Designed to Take Glass Sealing-Globe



Midget Guard Equipment Mounted on Type H Condulet Body and with Ley Receptacle and Lamp Installed (Broken-away View)

This equipment adapts Forms 5 and 10 Condulct bodies of the G and H series for use wherever a small, guarded electric light is required, such as on boats, in theatre dressing rooms, stairways, etc.

The equipment is designed to be attached to the adjustable bar furnished with the Condulct body.

Either key or keyless receptacles can be used.



Midget Guard Equipment Mounted on Type H Condulet Body and with Keyless Receptacle and Lamp Installed



#### MIDGET GUARD EQUIPMENT—Black Finish Complete with Guard HGV95, Receptacle and Guard Holder Receptacle Guard and Receptacle RMP3, Keyless Receptacle PE55 Guard Only Only and all necessary Screws. Holder PE55 Catalogue Number... HGV3595 HGV95 RMP3 Standard Package . . . 40 40 200 Ship. Wt. Std. Pkg... 95 lbs. 80 lbs. 30 lbs. 50 lbs. List Price, each. \$2.10† \$1.40 \$ .30 \$ .40

\*Other receptacles than PE55 which can be used with receptacle and guard holder RMP3, but which we do not furnish, are as follows:

Key Receptacles: ARROW E—8025, 8025W, 66609, 66609W. BRYANT—4484, 66609. G.E.CO.—GE043, GE324, GE414, GE419, GE471, GE487. HUBBELL—3049, 3147, 3307, 3732. PAISTE—5437, 5545. P. & S.—132, 617, 618, 811, 61387, 66609.

Keyless Receptacles: ARROW E—8026, 66610. BRYANT—66610. G. E. CO.—GE044, GE325, GE472, GE488 HUBBELL—3050, 3733. PAISTE—5438, 5546. P. & S.—146, 451, 60387, 88259.

†Forms 5 and 10 Condulet bodies of G and H series are not included in this price, but are listed on pages 57 to 60, inclusive.

#### TYPE SH REFLECTORS

For Guards V9, V90, VH9 and VH90-Furnished with necessary Fastening Screws

It is sometimes desirable to shut off the light from one side of a lamp mounted in a Condulet of the V or VH series, and type SH reflectors are designed for this purpose.

Two angle pieces on the face of the reflector hook over one of the

Two angle pieces on the face of the reflector hook over one of the guard rings. Tightening a screw in each angle piece holds the reflector in place.



Type V With Reflector SH4 Mounted

		er Surface Aluminumized	
* A	For V9 and V90 Guards	Standard Package Ship. Wt. Std. Pkg	SH4 35 40 lbs. \$1.70
	For VH9 and VH90 Guards		SH5 35 50 lbs. \$2.75

## HAND LAMPS

## TYPE VS—Aluminum

## TYPE VS—Brass

Vapor, Gas and Dust-proof Portable Hand Lamp Takes any Lamp with Dimensions not Exceeding 2½x5½ Inches\* Furnished with Crouse-Hinds Receptacle C9514, Clear Globe, Guard and Gaskets

Type VS hand lamps are exceptionally well suited for use in garages, refineries, flour mills,

for marine work, or wherever there is inflammable vapor, fine dust or moisture in the air.

Globes listed below can also be used on the V series of Condulets, and when so used take any lamp with dimensions not exceeding  $2\frac{1}{2}x4\frac{1}{4}$  inches. These dimensions permit the use of any lamp having a bulb that is no larger than an S14 or G18\frac{1}{2}.

The globes listed below are smaller than those listed in Condulet Catalogue No. 1000 and

when used on Condulets of the V series require a correspondingly smaller guard than that listed in Condulet Catalogue No. 1000. This smaller guard is listed below.



Type VS Hand Lamp

Guards VS095 and VS950, listed below for use with type VS hand lamps, have a hook and are provided with a locking cam, which is held closed by a knurled screw. Guards V950 and V95, listed below for use with Condulets of the V series, have no hook and are provided with a locking cam, which is arranged to take a padlock.

# TYPE VS HAND LAMP-Aluminum

Finish	Scratch Brush
Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	35

#### TYPE VS HAND LAMP-Brass

Finish	Marine
Catalogue Number Standard Package Shipping Weight Std. Pkg List Price, each	35 265 lbs.

#### GLOBES-5 Inches in Overall Length

For Type VS Hand Lamps and Condulets of the V Series \*\*



Color	Clear	Opal	Green	Blue	Orange	Ruby
Catalogue No	35 40 lbs.	V415 35 40 lbs. \$1.10	V425 35 40 lbs. \$1.70	V435 35 40 lbs. \$1.70	V445 35 40 lbs. \$1.70	V455 35 40 lbs \$2.35

#### GUARDS—Brass For Globes Listed on this Page

For Type VS Hand Lamps

For Condulets of the V Series\*\*



Galvan- ized	Marine	Finish	Marine	Black
VS095	VS950	. Catalogue No	V950	V95
35	35	. Standard Pkg	35	35
40 lbs.	40 lbs.	. Wt. Std. Pkg	40 lbs.	40 lbs.
\$2.00	\$2.00	List Price, each	\$1.80	\$1.80



\*These dimensions permit the use of any lamp having a bulb that is no larger than an S19 or G18½.

\*The V series of Condulets are listed on pages 98 to 101, inclusive.

If specified on order, leather gaskets will be furnished with type VS hand lamp, instead of

rubber gaskets, without extra charge. Gasket is listed separately on page 176.

(Cross Reference Page 105a) Digitized by GOOG Comments

# CONDULET BODIES-W SERIES TYPES W, WC, WL, WT AND WX

FOR PLUG RECEPTACLES-HUBBELL, 5624; GENERAL ELECTRIC CO., 102700

	TYPE W CONDULET BODIES—Black Enamel Finish							
	Size in inches	1/2	3/4	1				
Broken-away View, showing Receptacle and Cover Installed Prices do not include Receptacle or Cover	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	W1 100 115 lbs. \$ .50	W2 75 90 lbs. \$ .60	W3 25 45 lbs. \$ .70				
12	TYPE WC CONDULET B	ODIES—B1	ack Enamel I	inish				
	Size in inches	1/2	3/4	1				
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, éach	WC11 100 140 lbs. \$ .60	WC22 75 110 lbs. \$ .65	WC33 25 55 lbs. \$ .80				
	TYPE WL CONDULET BODIES—Black Enamel Finish							
	Size in inches	1/2	3/4	1				
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each		WL22 75 110 lbs. \$ .65	WL33 25 55 lbs. \$ .80				
The state of the s	TYPE WT CONDULET BODIES—Black Enamel Finish							
	Size in inches	1/2	3/4	1				
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	WT111 100 150 lbs. \$ .70	WT222 75 120 lbs. \$ .80	WT333 25 60 lbs. \$1.00				
	TYPE WX CONDULET BODIES—Black Enamel Finish							
	Size in inches	1/2	3/4	1				
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	WX1111 100 160 lbs. \$ .80	WX2222 75 150 lbs. \$ .90	WX3333 25 75 lbs. \$1.15				

#### COVERS

For Types W, WC, WL, WT and WX Condulet Bodies-Black Enamel Finish For 1-2, 3-4 and 1-Inch Condulet Bodies

 		_,			
For Atta	ach. Plug		Blank	Metal	
Sheet Steel	Cast Iron	Style of Cover	Sheet Steel	Cast Iron	
0 100 30 lbs.	0g 100 30 lbs.	Catalogue Number Standard Package Weight Std. Pkg	100	0bg 100 35 lbs.	

Finishes: Black enamel is the standard finish for both Condulet bodies and metal covers, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulet bodies and all galvanized finish on covers will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes on Condulet bodies and covers, cast brass and cast bronze Condulet bodies and brass and bronze covers with plain and special finishes, aluminum Condulet bodies and covers with plain and black enamel finish, see page 182.

Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package. No other assortment of Condulet bodies is allowed.

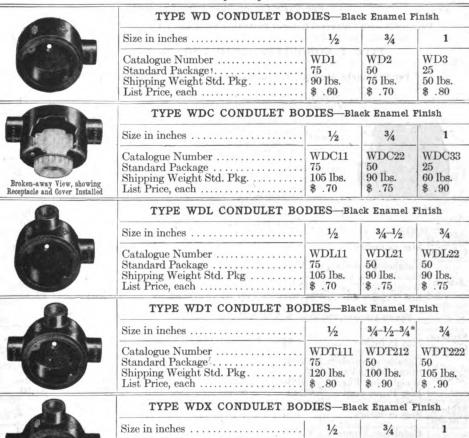
Black enameled and galvanized covers of both styles for Condulet bodies of the W series may be assorted to make up a standard package.

We will furnish receptacles for above Condulet bodies.

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# CONDULET BODIES-WD SERIES TYPES WD, WDC, WDL, WDT AND WDX

For Clamp Receptacles



COVERS-For Condulet Bodies of the WD Series-Black Enamel Finish Furnished with Fastening Screws

Catalogue Number ..... Standard Package .....

Shipping Weight Std. Pkg. .....

	Style of	11/6" Or	eningt	1½" Op	ening‡	Black	Metal
	Cover	Sheet Steel	Cast Iron	Sheet Steel	Cast Iron	Sheet Steel	Cast Iron
	Catalogue No	WD054	WD0054	WD048	WD0048	WD00	WD000
		75	75	75	75	75	75
	Wt. Std. Pkg	25 lbs.	40 lbs.	25 lbs.	40 lbs.	25 lbs.	45 lbs.
	List, each	<b>\$</b> .15	<b>\$</b> .30	<b>\$</b> .15	<b>\$</b> .30	<b>\$</b> .15	\$ .30

Prices for Condulet bodies do not include receptacles or covers.

\*Center hub is the smallest one.

Proper fastening screws are furnished with covers, and are so held in screw holes that they can not fall out.

We will furnish clamp receptacles for condulet bodies listed above.

Condulet bodies listed above take the following:

\*\*Cover with 1\{\text{-inch opening: ARROW E=86, 440. BRYANT=4014, 4057. FEDERAL=303, 304, 305. P. & 8. 86, 440. \$\frac{86, 440.}{2000}\$ Cover with 1\{\text{-inch opening: ARROW E=427, 439, 61577, 61578, 61877, 61988. BRYANT=4035, 4036, 61988. G. E. CO.—GE001, GE060, GE079, GE118, GE153, GE267, GE269, GE271. PAISTE=47566, 59439, 61988. P. & 8.—427, 436, 437, 439, 61577, 61578, 61877, 61988, 102703, 102704.

(Cross Reference Page 115a) Digitized by GOOGIC

WDX1111

140 lbs.

75

WDX2222

115 lbs.

\$1.00

50

**WDX3333** 

25

75 lbs.

\$1.25

# TYPE Y

#### For Cartridge or Plug Fuse Cut-outs

#### Furnished with Universal Cut-out Fastening Plate and all necessary Bolts and Screws

#### TYPE Y CONDULETS—DEAD END—Black Enamel Finish

#### For 30 Ampere, 250 Volt, N. E. C. Main Line Cut-outs—Cut-outs not Furnished

		Style of Cut-or		n inches	1/2	3/4	1
CONDUCET A		2-wir	e Stand Weigh	Catalogue Number . Standard Package Weight Std. Pkg List Price, each		Y2302 15 120 lbs. \$1.55	Y3302 10 90 lbs. \$1.65
		Style Cut-or		n inches	11/4	11/2	2
		2-wir	e Stand Weigh	ogue Number . lard Package ht Std. Pkg Price, each	Y4302 10 100 lbs. \$1.85	Y5302 5 60 lbs. \$1.95	Y6302 5 75 lbs. \$2.15
Style of Cut-out	Size in inches.		1/2	3/4	1	11/4	11/2
3-wire	Standard Package . 15 Weight Std. Pkg 140		71303 5 40 lbs. 1.95	Y2303 15 150 lbs. \$2.05	Y3303 10 100 lbs. \$2.15	Y4303 10 110 lbs. \$2.30	Y5303 5 65 lbs. \$2.45

## For 60 Ampere, 250 Volt, N. E. C. Main Line Cut-outs—Cut-outs not Furnished

Style of Cut-out	Size in inches	3/4	1	11/4	11/2	2
2-wire	Catalogue Number.	Y2602	Y3602	Y4602	Y5602	Y6602
	Standard Package.	15	10	10	5	5
	Weight Std. Pkg	170 lbs.	120 lbs.	130 lbs.	75 Ibs.	80 lbs.
	List Price, each	\$2.40	\$2.55	\$2.75	\$2.90	\$3.00
Style of Cut-out	Dize in inches	3/4	1	11/4	11/2	2
3-wire	Catalogue Number.	Y2603	Y3603	Y4603	Y5603	Y6603
	Standard Package.	15	10	10	5	5
	Weight Std. Pkg	220 lbs.	150 lbs.	160 lbs.	90 lbs.	95 lbs.
	List Price, each	\$3.15	\$3.25	\$3.55	\$3.70	\$3.85

We will furnish cut-outs for above Condulets, and the universal out-out fastening plates, furnished with the Condulets, take the following cut-outs:

## 30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs

2-Wire: BRYANT—(Cartridge) 1917, (Plug) 62965. D. & W.—(Cartridge) 91102. G. B. CO.—(Cartridge) 34367, (Plug) 62965. NOARK—(Cartridge) 3327. PAISTE—(Cartridge) 72965, (Plug) 2965. SHAWMUT—(Cartridge) 2077. TRUMBULL—(Cartridge) 29653, (Plug) 2965. WEBER—(Plug) 62965. UNION—(Cartridge)

2010.
3-Wire: BRYANT—(Cartridge) 1924. (Plug) 62165. D. & W.—(Cartridge) 91103. G. E. CO.—(Cartridge) 34372, (Plug) 62165. NOARK—(Cartridge) 3328. PAISTE—(Cartridge) 72165. (Plug) 2165. SHAWMUT—(Cartridge) 2079. TRUMBULL—(Cartridge) 21653, (Plug) 2165. WEBER—(Plug) 62165. UNION—(Cartridge) 2012.

# 60 Ampere, 250 Volt, Cut-outs

2-Wire: BRYANT—(Cartridge) 1918. D. & W.—(Cartridge) 91108. G. E. CO.—(Cartridge) 34376. NOARK—
(Cartridge) 3329. PAISTE—(Cartridge) 82965. SHAWMUT—(Cartridge) 2078. TRUMBULL—(Cartridge) 29656. UNION—(Cartridge) 2011.

3-Wire: BRYANT—(Cartridge) 1925. D. & W.—(Cartridge) 91109. G. E. CO.—(Cartridge) 34377. NOARK—
(Cartridge) 3330. PAISTE—(Cartridge) 82165. SHAWMUT—(Cartridge) 2080. TRUMBULL—(Cartridge) 21656. UNION—(Cartridge) 2013.

For finishes, see note on page 91.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page 171.

Listings of type Y Condulets are continued on page 120.

Condulets of the Y series are listed on pages 119 to 129, inclusive.

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# CONDULETS—Y SERIES—Continued TYPES Y AND YC

For Cartridge or Plug Fuse Cut-outs

Furnished with Universal Cut-out Pastening Plate and all necessary Bolts and Screws

#### TYPE Y CONDULETS-DEAD END-Black Enamel Finish-Continued

Style of Cut-out	Size in inches	1	11/4	11/2	2	21/2
2-wire	Catalogue Number Standard Package Weight Std. Pkg List Price, each	10 220 lbs.	Y41002 10 230 lbs. \$5.50	Y51002 5 120 lbs. \$5.65	Y61002 5 130 lbs. \$5.75	Y71002 5 140 lbs. \$5.85
Style of Cut-out	Size in inches	1	11/4	11/2	2	21/2
3-wire	Catalogue Number Standard Package Weight Std. Pkg List Price, each	10 230 lbs.	Y41003 10 240 lbs. \$6.25	Y51003 5 140 lbs. \$6.35	Y61003 5 150 lbs. \$6.45	Y71003 5 160 lbs. \$6.55
Por	30 or 60 Ampere, 600 Volt,	N. E. C. M	ain Line Cu	t-outs-Cut-	outs not Fur	nished
Style of Cut-out	Size in inches	1/2	3/4	1	11/4	11/2
1-wire	Catalogue Number Standard Package Weight Std. Pkg	15	Y26016 15 185 lbs.	Y36016 10 125 lbs.	Y46016 10 130 lbs.	Y56016 5 70 lbs.

We will furnish cut-outs for above Condulets, and the universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs:

\$3.25

**\$3.35** 

**\$**3.45

List Price, each ...... \$3.15

#### 100 Ampere, 350 Volt, Cut-outs

2-Wire: BRYANT—(Cartridge) 271. D. & W.—(Cartridge) 91119. G. B. CO.—(Cartridge) 36801. NOARK—(Cartridge) 3331. SHAWMUT—(Cartridge) 2101. UNION—(Cartridge) 2014.

3-Wire: BRYANT—(Cartridge) 272. D. & W.—(Cartridge) 9112(C. G. B. CO.—(Cartridge) 36800. NOARK—(Cartridge) 3332. SHAWMUT—(Cartridge) 2102. UNION—(Cartridge) 2015.

### 30 and 60 Ampere, 600 Volt, Cut-outs

1-Wire, 30 Ampere: BRYANT—(Cartridge) 1937. D. & W.—(Cartridge) 28076. G. B. CO.—(Cartridge) 34991. NOARK—(Cartridge) 5600. SHAWMUT—(Cartridge) 20735. UNION—(Cartridge) 4003. 1-Wire, 60 Ampere: BRYANT—(Cartridge) 1938. D. & W.—(Cartridge) 28077. G. B. CO.—(Cartridge) 35101 NOARK—(Cartridge) 5601. SHAWMUT—(Cartridge) 20745. UNION—(Cartridge) 4004.

#### TYPE YC CONDULETS—THROUGH FEED—Black Enamel Finish

#### For 30 Ampere, 250 Volt, N. E. C. Main Line Cut-outs-Cut-outs not Furnished

	Style of Cut-out	Size in inches	1/21/2	3/43/4	1-1
	2-wire	Catalogue Number Standard Package Weight Std. Pkg List Price, each	15 120 lbs.	YC22302 15 130 lbs. \$1.80	YC33302 10 100 lbs. \$1.90
CONDUCET	Style of Cut-out	Size in inches	11/4-11/4	11/2-11/2	22
1 (STORE)	2-wire	Catalogue Number Standard Package Weight Std. Pkg List Price, each	10 110 lbs.	YC55302 5 65 lbs. \$2.20	YC66302 5 70 lbs. \$2.40

We will furnish cut-outs for above type YC Condulets, and the universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs:

2-Wire, 30 Ampere Cut-outs: BRYANT—(Cartridge) 1917, (Plug) 62965. D. & W.—(Cartridge) 91102. G. E. CO.—(Cartridge) 34367, (Plug) 62965. NOARK—(Cartridge) 3327. PAISTE—(Cartridge) 72965, (Plug) 2965. SHAWMUT—(Cartridge) 2077. TRUMBULL—(Cartridge) 29653, (Plug) 2965. WEBER—(Plug) 62965. UNION—(Cartridge) 2010.

For finishes and assortments, see note on page 91. Condulet reducers are listed on page 171. Listings of type YC Condulets are continued on opposite page. Condulets of the Y series are listed on pages 119 to 129, inclusive.

# CONDULETS—Y SERIES—Continued TYPE YC—Continued

# For Cartridge or Plug Fuse Cut-outs

Furn	nished with Universa	al Cut-out Pas	stening Plate	and all necess	ary Bolts and	Screws		
TY	PE YC CONDUL	<del></del>						
	For 30 Ampere, 250	Volt, N. E. C.	Main Line Cut	-outs-Cut-out	s not Furnishe	ed		
Style of Cut-out	Size in inches	1/21/2	3/43/4	11	11/411/4	11/2-11/2		
3-wire	Catalogue No Standard Package. Weight Std. Pkg List Price, each	15 140 lbs.	15 145 lbs.	10	10 130 lbs.	YC55303 5 70 lbs. \$2.70		
	Por 60 Ampere, 250	Volt, N. E. C.	Main Line Cut	-outs—Cut-out	s not Furnish	ed		
Style of Cut-out	Size in inches	3/43/4	11	11/411/4	11/2-11/2	22		
2-wire	Catalogue No Standard Package. Weight Std. Pkg List Price, each	YC22602 15 210 lbs. \$2.65	YC33602 10 145 lbs. \$2.75	YC44602 10 150 lbs. \$2.85	YC55602 5 85 lbs. \$3.15	YC66602 5 90 lbs. \$3.25		
Style of Cut-out	Size in inches	1		11/411/4	11/211/2			
3-wire	Catalogue No Standard Package. Weight Std. Pkg List Price, each	YC22603 15 260 lbs. \$3.40	YC33603 . 10 170 lbs. \$3.50	YC44603 10 180 lbs. \$3.60	5	YC66603 5 105 lbs. \$4.10		
	For 100 Ampere, 250	Volt, N. E. C.	Main Line Cut	-outs—Cut-ou				
Style of Cut-out	Size in inches	11	11/411/4	11/211/2	22	21/221/2		
2-wire	Catalogue No Standard Package. Weight Std. Pkg List Price, each	YC331002 10 270 lbs. \$5.45	YC441002 10 280 lbs. \$5.80	YC551002 5 140 lbs. \$5.90	YC661002 5 150 lbs. \$6.10	YC771002 5 160 lbs. \$6.20		
Style of Cut-out	Size in inches							
3-wire	Catalogue No Standard Package. Weight Std. Pkg List Price, each	10 280 lbs.	10	5 145 lbs.	YC661003 5 150 lbs. \$6.75	YC771003 5 160 lbs. \$6.90		
P	or 30 or 60 Ampere, 6	300 Volt, N. E.	C. Main Line C	ut-outs—Cut-	outs not Furni	shed		
Style of Cut-out	Size in inches	1/21/2	3/43/4	11	11/411/4	11/211/2		
1-wire	Catalogue No Standard Package. Weight Std. Pkg List Price, each			10 130 lbs.	140 lbs.	YC556016 5 80 lbs. \$3.90		
3-Wire: Br 34372, ( —(Carti	We will furnish cut-outs for above Condulets, and the universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs:  30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs  3-Wire: BRYANT—(Cartridge) 1924, (Plug) 62165. D. & W.—(Cartridge) 91103. G. E. CO.—(Cartridge) 34372, (Plug) 62165. NOARK—(Cartridge) 3328. PAISTE—(Cartridge) 72165, (Plug) 2165. SHAWMUT—(Cartridge) 2019. TRUMBULL—(Cartridge) 21653, (Plug) 2165. WEBER—(Plug) 62165. UNION—(Cartridge) 2012.							
(Cartrid 29656. 3-Wire: BF (Cartrid 21656: 2-Wire, 100 1-Wire, 30 For finished	AYANT—(Cartridge) 19 ge) 3329. PAISTE—(4 UNION—(Cartridge) 29 yYANT—(Cartridge) 29 ge) 3330. PAISTE—(4 UNION—(Cartridge) 2 D Ampere and 3-Wire, Ampere and 1-Wire, see and assortments, see educers are listed on 1	18. D. & W.— Cartridge) 82968 011. 25. D. & W.—( Cartridge) 82168 013. , 100 Ampere, 60 e note on page	5. SHAWMUT- Cartridge) 9110 5. SHAWMUT- 250 Volt, Cut- 0 Volt, Cut-out	98. G. E. CO.— —(Cartridge) 20 9. G. E. CO.— —(Cartridge) 20	78. TRÜMBUI -(Cartridge) 343 80. TRUMBUI -	L—(Cartridge) 77. NOARK— (Cartridge)		
	of the V series are list		a to 100 inclus	iw.	( )	000		

Condulets of the Y series are listed on pages 119 to 129, inclusive.

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## TYPE YL

For Cartridge or Plug Fuse Cut-outs

Furnished with Universal Cut-out Fastening Plate and all necessary Bolts and Screws

#### TYPE YL CONDULETS-THROUGH FEED-Black Enamel Finish

#### For 30 Ampere, 250 Volt, N. E. C. Main Line or Single Branch Cut-outs—Cut-outs not Furnished

	Style of Cut-out	Size in inches	1/2	3/4	11
00 1	2-wire	Catalogue Number Standard Package Weight Std. Pkg List Price, each	15 140 lbs.	YL22302 15 150 lbs. \$1.85	YL33302 10 100 lbs. \$1.95
	Style of Cut-out	Size in inches	1/2	3/4	11
	3-wire	Catalogue Number Standard Package Weight Std. Pkg List Price, each:	15 170 lbs.	YL22303 15 175 lbs. \$2.75	YL33303 10 120 lbs. \$2.85

#### For 60 Ampere, 250 Volt, N. E. C. Main Line or Single Branch Cut-outs—Cut-outs not Furnished

Style of Cut-out	3/4	11	Size in inches	Style of Cut-out	3/4	1
2-wire	YL22602 15 200 lbs. \$2.60	Y L33602 10 140 lbs. \$2.70	Catalogue NumberStandard PackageWeight Std. PkgList Price, each	3-wire	YL22603 15 260 lbs. \$4.20	YL33603 10 190 lbs. \$4.30

- We will furnish cut-outs for above Condulets, and the universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs: 30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Main Line Cut-outs
- 30 Manpere, 200 Volt, Cartridge and 30 Ampere, 120 Volt, Fig Fuse shall fine Cut-ottes (Cartridge) 1910. G. E. CO.—(Cartridge) 34367, (Plug) 62965. NOARK—(Cartridge) 3327. PAISTE—(Cartridge) 72965, (Plug) 2965. SHAWMUT—(Cartridge) 2077. TRUMBULL—(Cartridge) 29653, (Plug) 2965. WEBER—(Plug) 62965. UNION—(Cartridge) 2010.

  3-Wire: BRYANT—(Cartridge) 1924, (Plug) 62165. D. & W.—(Cartridge) 91103. G. E. CO.—(Cartridge) 34372, (Plug) 62165. NOARK—(Cartridge) 3328. PAISTE—(Cartridge) 72165, (Plug) 2165. SHAWMUT—(Cartridge) 2079. TRUMBULL—(Cartridge) 21653, (Plug) 2165. WEBER—(Plug) 62165. UNION—(Cartridge) 2079.
  - 30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Single Branch Cut-outs
- ov ampere, 200 voit, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Single Branch Cut-outs
  2 to 2-Wire: BRYANT—(Cartridge) 1919, (Plug) 61935. D. & W.—(Cartridge) 91104. G. E. CO.—(Cartridge) 34368, (Plug) 61935. NOARK—(Cartridge) 3345. PAISTE—(Cartridge) 1935, (Plug) 1935. SHAWMUT—(Cartridge) 2081. TRUMBULL—(Cartridge) 19353, (Plug) 1935. WEBER—(Plug) 61935. UNION—(Cartridge) 2020.
  3 to 3-Wire: BRYANT—(Cartridge) 1926, (Plug) 8042. D. & W.—(Cartridge) 91105. G. E. CO.—(Cartridge) 34373, (Plug) 8042. NOARK—(Cartridge) 3346. PAISTE—(Cartridge) 78042, (Plug) 8042. SHAWMUT—(Cartridge) 2023. TRUMBULL—(Cartridge) 80423, (Plug) 8042. WEBER—(Plug) 8042. UNION—(Cartridge) 2022.
  - 60 Ampere, 250 Volt, Main Line Cut-outs
- 2-Wire: BRYANT—(Cartridge) 1918. D. & W.—(Cartridge) 91108. G. E. CO.—(Cartridge) 34376. NOARK—(Cartridge) 3329. PAISTE—(Cartridge) 82965. SHAWMUT—(Cartridge) 2078. TRUMBULL—(Cartridge) 29656. UNION—(Cartridge) 2011.

  3-Wire: BRYANT—(Cartridge) 1925. D. & W.—(Cartridge) 91109. G. E. CO.—(Cartridge) 34377. NOARK—(Cartridge) 3330. PAISTE—(Cartridge) 82165. SHAWMUT—(Cartridge) 2080. TRUMBULL—(Cartridge) 21656. UNION—(Cartridge) 2013.
- 2000. UNION—(Cartridge) 2013.

  60 Ampere, 250 Volt, Single Branch Cut-outs

  2 to 2-Wire: BRYANT—(Cartridge) 1920. D. & W.—(Cartridge) 91110. G. E. CO.—(Cartridge) 34378. NO-ARK—(Cartridge) 19356. UNION—(Cartridge) 2021.

  3 to 3-Wire: BRYANT—(Cartridge) 1927. D. & W.—(Cartridge) 91111. G. E. CO.—(Cartridge) 34379. NO-ARK—(Cartridge) 3438. PAISTE—(Cartridge) 88042. SHAWMUT—(Cartridge) 2084. TRUMBULL—(Cartridge) 80426. UNION—(Cartridge) 2023.
- For finishes, see note on page 91.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page 171.

Condulets of the Y series are listed on pages 119 to 129, inclusive.

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### TYPE YR

### For Cartridge or Plug Fuse Cut-outs

#### Furnished with Universal Cut-out Fastening Plate and all necessary Bolts and Screws

#### TYPE YR CONDULETS-THROUGH FEED-Black Enamel Finish

#### For 30 Ampere, 250 Volt, N. E. C. Main Line or Single Branch Cut-outs—Cut-outs not Furnished

	Style of Cut-out	Size in inches	1/2	3/4	1
- 80	2-wire	Catalogue Number Standard Package Weight Std. Pkg List Price, each	15 140 lbs.	YR22302 15 150 lbs. \$1.85	YR33302 10 100 lbs. \$1.95
	Style of Cut-out	Size in inches	1/2	3/4	1
	3-wire	Catalogue Number Standard Package Weight Std. Pkg List Price, each	15 170 lbs.	YR22303 15 175 lbs. \$2.75	YR33303 10 120 lbs. \$2.85

#### For 60 Ampere, 250 Volt, N. E. C. Main Line or Single Branch Cut-outs—Cut-outs not Furnished

Style of Cut-out	3/4	11	Size in inches	Style of Cut-out	3/4	11
2-wire	YR22602 15 200 lbs. \$2.60	YR33602 10 140 lbs. \$2.70	Catalogue Number Standard Package Weight Std. Pkg List Price, each	3-wire	YR22603 15 260 lbs. \$4.20	YR33603 10 190 lbs. \$4.30

We will furnish cut-outs for above Condulets, and the universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs:

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Main Line Cut-outs

2-Wire: BRYANT—(Cartridge) 1917, (Plug) 62965. D. & W.—(Cartridge) 91102. G. E. CO.—(Cartridge) 34367, (Plug) 62965. NOARK—(Cartridge) 3327. PAISTE—(Cartridge) 72965, (Plug) 2965. SHAWMUT—(Cartridge) 2077. TRUMBULL—(Cartridge) 29653, (Plug) 2965. WEBER—(Plug) 62965. UNION—(Cartridge)

tridge) 2017. IRUMBULL—(Cartridge) 29053, (Flug) 2905. WEBER—(Flug) 02905. UNION—(Cartridge) 2010. (ire: BRYANT—(Cartridge) 1924, (Plug) 62165. D. & W.—(Cartridge) 91103. G. E. CO.—(Cartridge) 34372, (Plug) 62165. NOARK—(Cartridge) 3328. PAISTE—(Cartridge) 72165, (Plug) 2165. SHAWMUT—(Cartridge) 2079. TRUMBULL—(Cartridge) 21653, (Plug) 2165. WEBER—(Plug) 62165. UNION—(Cartridge) 2012. 3-Wire:

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Single Branch Cut-outs

2 to 2-Wire: BRYANT—(Cartridge) 1919, (Plug) 61935. D. & W.—(Cartridge) 91104. G. E. CO.—(Cartridge) 34368, (Plug) 61935. NOARK—(Cartridge) 3345. PAISTE—(Cartridge) 71935, (Plug) 1935. SHAWMUT—(Cartridge) 2081. TRUMBULL—(Cartridge) 19353, (Plug) 1935. WEBER—(Plug) 61935. UNION—

—(Cartridge) 2031. ARCHARCAL (Cartridge) 2031. ARCHARCAL (Cartridge) 2020.

3 to 3-Wire: BRYANT—(Cartridge) 1926, (Plug) 8042. D. & W.—(Cartridge) 91105. G. E. CO.—(Cartridge) 34373, (Plug) 8042. NOARK—(Cartridge) 3346. PAISTE—(Cartridge) 78042, (Plug) 8042. SHAWMUT—(Cartridge) 2083. TRUMBULL—(Cartridge) 80423, (Plug) 8042. WEBER—(Plug) 8042. UNION—(Cartridge) 8042. WEBER—(Plug) 8042. UNION—(Cartridge) 8042. WEBER—(Plug) 8042. UNION—(Cartridge) 8042. WEBER—(Plug) 8042. UNION—(Cartridge) 8042. WEBER—(Plug) 8042. UNION—(Cartridge) 8042. WEBER—(Plug) 8042. UNION—(Cartridge) 8042. WEBER—(Plug) 8042. UNION—(Cartridge) 8042. WEBER—(Plug) 8042. UNION—(Cartridge) 8042. WEBER—(Plug) 8042. UNION—(Cartridge) 8042. WEBER—(Plug) 8042. UNION—(Cartridge)

60 Ampere, 250 Volt, Main Line Cut-outs

2-Wire: BRYANT-(Cartridge) 302 29656. UNION 3-Wire: BRYANT-

ire: BRYANT—(Cartridge) 1918. D. & W.—(Cartridge) 91108. G. E. CO.—(Cartridge) 34376. NOARK—(Cartridge) 3329. PAISTE—(Cartridge) 82965. SHAWMUT—(Cartridge) 2078. TRUMBULL—(Cartridge) 29656. UNION—(Cartridge) 2011. ire: BRYANT—(Cartridge) 1925. D. & W.—(Cartridge) 91109. G. E. CO.—(Cartridge) 34377. NOARK—(Cartridge) 3330. PAISTE—(Cartridge) 82165. SHAWMUT—(Cartridge) 2080. TRUMBULL—(Cartridge) 21656. UNION—(Cartridge) 2013. · 21656.

60 Ampere, 250 Volt, Single Branch Cut-outs

2 to 2-Wire: BRYANT—(Cartridge) 1920. D. & W.—(Cartridge) 91110. G. E. CO.—(Cartridge) 34378. NOARK—(Cartridge) 3347. PAISTE—(Cartridge) 81935. SHAWMUT—(Cartridge) 2082. TRUMBULL—(Cartridge) 19356. UNION—(Cartridge) 2021.

3 to 3-Wire: BRYANT—(Cartridge) 1927. D. & W.—(Cartridge) 91111. G. E. CO.—(Cartridge) 34379. NO-ARK—(Cartridge) 3348. PAISTE—(Cartridge) 88042. SHAWMUT—(Cartridge) 2084. TRUMBULL—(Cartridge) 80426. UNION—(Cartridge) 2023.

For finishes, see note on page 91.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page 171.

Condulets of the Y series are listed on pages 119 to 129, inclusive.



# TYPE YS

For Cartridge or Plug Fuse Cut-outs
Furnished with Universal Cut-out Fastening Plate and all necessary Bolts and Screws

### TYPE YS CONDULETS-THROUGH FEED-Black Enamel Finish

F	or 30 Ampere, 250 V	olt, N.E.	C. Si	ngle Branch C	ut-outs-Cut-	outs not Furni	shed
	1	Style of Cut-out	Size	e in inches		1/2 1/2 1/2 in. mains 1/2 in. branch	3/4 1/2 3/4 3/4 in. mains 1/2 in. branch
	-	2 to 2-wire	Sta Shi	talogue Numb ndard Packas pping Weigh t Price, each.	get Std. Pkg	YS111302 15	YS212302 15 150 lbs. \$2.10
(Ide	1	Style of Cut-out	Size	e in inches		3/4 3/4 in. mains 3/4 in. branch	1/2
		2 to 2-wire	Sta Shi Lis	talogue Numb ndard Packa pping Weigh t Price, each.	ge t Std. Pkg	15 160 lbs. \$2.10	YS313302 10 100 lbs. \$2.15
Style of Cut-out	Size in inches	1 in. ma	uns	1½ 1½ 1¼ in. mains ½ in. branch	11/4 in. mains	1½ in. mains	1½ in. main
2 to 2-wire	Catalogue No Standard Package Weight Std. Pkg List Price, each	YS333330	)2	YS414302 10 105 lbs. \$2.60	YS424302 10 110 lbs. \$2.70	YS515302 5 70 lbs. \$2.85	YS525302 5 75 lbs. \$2.90
Style of Cut-out	Size in inches	1/2 in. m:	1/2	3/4 1/2 3/4 3/4 in. mains 1/2 in. branch	3/4	1/2 1 1 in. mains 1/2 in. branch	1 1 in. mains 1 in. branch
3 to 3-wire	Catalogue No Standard Package Weight Std. Pkg . List Price, each	YS11130	)3	YS212303 15 220 lbs. \$2.90	YS222303 15 230 lbs. \$2.90	YS313303 10 130 lbs. \$3.00	YS333303 10 135 lbs. \$3.15
Style of Cut-out	Size in inches	11/4 in. m	ains	3/4 11/4 in. mains 3/4 in. branch	$1\frac{1}{2}$ in. mains	$1\frac{1}{2}$ in: mains	1½ in. main
3 to 3-wire	Catalogue No Standard Package Weight Std. Pkg List Price, each	130 lbs.	)3	YS424303 10 140 lbs. \$3.45	YS515303 5 85 lbs. \$3.55	YS525303 5 90 lbs. \$3.65	YS535303 5 95 lbs. \$3.75

We will furnish cut-outs for above Condulets, and the universal cut-out fastening plates, furnished, take 30 ampere cut-outs enumerated on opposite page. For finishes and assortments, see note on page 91.

Condulet reducers are listed on page 171.

Listings of type YS Condulets are continued on opposite page.

Condulets of the Y series are listed on pages 119 to 129, inclusive gitized by

## TYPE YS—Continued

For Cartridge or Plug Fuse Cut-outs

Furnished with Universal Cut-out Fastening Plate and all necessary Bolts and Screws

TY	PE YS CONDULI	ETS—THROU	JGH FEED-	-Black Ename	l Finish—Cont	inued
Po	r 60 Ampere, 250 Vo	olt, N. E. C. Si	ngle Branch (	ut-outs—Cut-	outs not Furn	ished
Style of Cut-out	Size in inches	1/2 3/4 3/4 in. mains 1/2 in. branch	3/4 3/4 in. mains 3/4 in. branch	1/2 1 1 in. mains 1/2 in. branch	1 in. mains 1 in. branch	1/2 11/4 11/4 in. mains 1/2 in. branch
2 to 2-wire	Catalogue No Standard Package Weight Std. Pkg List Price, each	YS212602 15 210 lbs. \$2.85	YS222602 15 220 lbs. \$2.90	YS313602 10 150 lbs. \$2.95	YS333602 10 155 lbs. \$2.95	YS414602 10 160 lbs. \$3.00
Style of Cut-out	Size in inches		1½ 1½ 1½ in. mains	3/4————————————————————————————————————	1	11/42 2 in. mains
2 to 2-wire	Catalogue No Standard Package Weight Std. Pkg List Price, each	165 lbs.	YS515602 5 90 lbs.´ \$3.40	YS525602 5 95 lbs. \$3.50	YS535602 5 100 lbs. \$3.60	YS646602 5 115 lbs. \$3.70
Style of Cut-out	Size in inches	3/4 1/2 3/4 in. mains 1/4 in. branch	3/4 3/4 3/4 in. mains 3/4 in. branch	1/2 1 1 in. mains 1/2 in. branch	3/4————————————————————————————————————	1 1 in. mains 1 in. branch
3 to 3-wire	Catalogue No Standard Package Weight Std. Pkg. List Price, each	YS212603	YS222603 15 310 lbs. \$4.45	YS313603 10 220 lbs. \$4.50	YS323603 10 225 lbs. \$4.60	YS333603 10 230 lbs. \$4.75
Style of Cut-out	Size in inches	34————————————————————————————————————	1 1/4 1 1/4 11/4 in. mains 1 in. branch	1½ 1½ 1½ in. mains 1¼ in. branch	1—————————————————————————————————————	11/4 2 2 in. mains 1½ in. branch
3 to 3-wire	Catalogue No Standard Package Weight Std. Pkg. List Price, each	YS424603	YS434603 10 230 lbs. \$5.15	YS545603 5 130 lbs. \$5.30	YS636603 5 140 lbs. \$5.40	YS646603 5 150 lbs. \$5.50

We will furnish cut-outs for Condulets listed on this and the opposite page, and the universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs:

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs

2 to 2-Wire: BRYANT—(Cartridge) 1919, (Plug) 61935. D. & W.—(Cartridge) 91104. G. B. CO.—(Cartridge) 34368, (Plug) 61935. NOARK—(Cartridge) 3345. PAISTE—(Cartridge) 71935, (Plug) 1935. SHAWMUT—(Cartridge) 2081. TRUMBULL—(Cartridge) 19353, (Plug) 1935. WEBER—(Plug) 61935. UNION—(Cartridge) 2020.
3 to 3-Wire: BRYANT—(Cartridge) 1926, (Plug) 8042. D. & W.—(Cartridge) 91105. G. B. CO.—(Cartridge) 34373, (Plug) 8042. NOARK—(Cartridge) 3346. PAISTE—(Cartridge) 78042, (Plug) 8042. SHAWMUT—(Cartridge) 2083. TRUMBULL—(Cartridge) 80423, (Plug) 8042. WEBER—(Plug) 8042. UNION—(Cartridge) 2022. 60 Ampere, 250 Volt, Cut-outs

to 2-Wire: BRYANT—(Cartridge) 1920. D. & W.—(Cartridge) 91110. G. E. CO.—(Cartridge) 34378. NO-ARK—(Cartridge) 3347. PAISTE—(Cartridge) 81935. SHAWMUT—(Cartridge) 2082. TRUMBULL—(Cartridge) 19356. UNION—(Cartridge) 2021.

3 to 3-Wire: BRYANT—(Cartridge) 1927. D. & W.—(Cartridge) 91111. G. E. CO.—(Cartridge) 34379. NO-ARK—(Cartridge) 3348. PAISTE—(Cartridge) 88042. SHAWMUT—(Cartridge) 2084. TRUMBULL—(Cartridge) 80426. UNION—(Cartridge) 2023.

For finishes, see note on page 91.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page 171.

Condulets of the Y series are listed on pages 119 to 129, inclusive.



# TYPE YD

# For Cartridge or Plug Fuse Cut-outs

#### Furnished with Universal Cut-out Fastening Plate and all necessary Bolts and Screws

### TYPE YD CONDULETS-DEAD END-Black Enamel Pinish .

Po	r 30 Ampere, 25	D Volt, N. E.	S	Style of Cut-out		e in inches.	1/2 1/2 1/2 1/2 1/2 main	Lieuwen and a
	• • • • • • • • • • • • • • • • • • •	1		2 to 2- wire or 3 to 2- wire	Sta	talogue No. andard Pkg. t. Std. Pkg. st Price, ea.		YD121302 15 160 lbs. \$2.95
. \		/ .		Style of Cut-out	Siz	e in inches.	$3\sqrt{4}$ $3\sqrt{4}$ $3\sqrt{4}$ $3\sqrt{4}$ $3\sqrt{4}$ main $3\sqrt{4}$ branches	$\frac{1}{2}$ $\frac{1}{1}$ $\frac{1}{2}$ main $\frac{1}{2}$ branches
	,		,	2 to 2- wire or 3 to 2- wire	Sta	talogue No. andard Pkg. t. Std. Pkg. st Price, ea.	15	YD131302 10 110 lbs. \$3.00
Style of Cut-out	Size in inches.	3/4 1 3/4 1" main 3" branches	11/4 11/4 main	3/4 11/4 1 <sup>1</sup> / <sub>4</sub> " ms <sup>3</sup> / <sub>4</sub> " brance	in	$\frac{1}{2}\frac{1}{1}\frac{1}{2}$ $\frac{1}{2}$ main $\frac{1}{2}$ branches	1½ 1½ main	3/4 7 3/4 2" main 3" branches
2 to 2- wire or 3 to 2- wire	Catalogue No. Standard Pkg. Wt. Std. Pkg. List Price, ea.	10 160 lbs.	YD141302 10 170 lbs. \$3.40	YD242 10 175 lbs \$3.50		YD151302 5 85 lbs. \$3.55	YD353302 5 90 lbs. \$3.70	YD262302 5 95 lbs. \$3.75
Style of Cut-out	Size in inches.	1/2 1/2 3/4 3/4 main ½" branches	3/4 3" main	1/2 1 ma 1" ma ½" brance	in	3/4   3/4 1" main 3" branches	$\frac{1}{2}$ $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ main $\frac{1}{2}$ branches	$ \frac{3}{4} \frac{3}{1} \frac{3}{4} $ $ \frac{1}{4}^{1}$ main $ \frac{3}{4}^{n}$ branches
3 to 3-wire	Catalogue No. Standard Pkg. Wt. Std. Pkg. List Price, ea.	15	Y D222303 15 280 lbs. \$4.25	YD131 10 210 lbs \$4.25		YD232303 10 220 lbs. \$4.35	YD141303 10 230 lbs. \$4.70	YD242303 10 235 lbs. \$4.75
Style of Cut-out	Size in inches.	1 1/4 1¼" main 1" branches	$ \begin{array}{c c} 1/2 & 1/2 \\ \hline 1^1/2 & 1^1/2 \\ 1^1_2'' \text{ main} \\ \frac{1}{2}'' \text{ branches} \end{array} $	1 1½ 1½ 1½ ms 1" branc	in	3/4 3/4 2 2" main 3" branches		11/4 11/4 2 2" main 1\frace4"branch's
3 to 3-wire	Catalogue No. Standard Pkg. Wt. Std. Pkg. List Price, ea.	10 235 lbs.	YD151303 5 120 lbs. \$4.80	YD353 5 130 lbs \$4.85		YD262303 5 135 lbs. \$4.90	YD363303 5 140 lbs. \$5.00	YD464303 5 145 lbs. \$5.10

We will furnish cut-outs for above Condulets, and the universal cut-out fastening plates, furnished, take 30 ampere cut-outs enumerated on opposite page. For finishes and assortments, see note on page 91. Condulet reducers are listed on page 171.

Listings of type YD Condulets are continued on opposite page.

Condulets of the Y series are listed on pages 119 to 129, inclusive ignized by

# TYPE YD—Continued

For Cartridge or Plug Fuse Cut-outs

Furnished with Universal Cut-out Pastening Plate and all necessary Bolts and Screws

#### TYPE YD CONDULETS—DEAD END—Black Enamel Finish—Continued

Fo	r 60 Ampere, 250 Volt, N. E	. C. Double Bra	nch Cut-outs-C	ut-outs not Pu	rnished
Style of Cut-out	Size in inches		1/2 1/2 1 in. main 2 in. branches	3/4 3/4 1 in. main 3 in. branches	1½ 1½ in. main
2 to 2-wire or 3 to 2-wire	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	15	YD131602 10 280 lbs. \$6.35	YD232602 10 290 lbs. \$6.40	YD343602 10 290 lbs. \$7.00
Style of Cut-out	Size in inches	1½ 1½ in. main	11/4 11/2 11/2 11/2 in. main 11/4 in. branches	ż 2 in. main	ż 2 in. main
2 to 2-wire or 3 to 2-wire	Shinning Weight Std Pkg	5	YD454602 5 180 lbs. \$7.10	YD464602 5 190 lbs. \$7.15	YD565602 5 200 lbs. \$7.20
Style of Cut-out	Size in inches	3/4 3/4 3/4 \$\frac{1}{2}\$ in. main \$\frac{2}{3}\$ in. branches	3/4 3/4 1 1 in. main 3 in. branches	3/4 3/4 11/4 1½ in. main ½ in. branches	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
3 to 3-wire	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	YD222603 15 520 lbs. \$8.30	YD232603 10 360 lbs. \$8.35	YD242603 10 370 lbs. \$8.90	YD343603 10 375 lbs. \$9.05
Style of Cut-out	Size in inches	1 1/2 1½ in. main 1 in. branches	1½ 1½ 1½ 1; in. main 1; in. branches	2 2 in. main	1½ 1½ 1½ 2 2 in. main 1½ in. branches
3 to 3-wire	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	5 ,	YD454603. 5 210 lbs. \$9.30	Y D363603 5 210 lbs.	YD565603 5 220 lbs. \$9.60

We will furnish cut-outs for Condulets listed on this and the opposite page, and the universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs:

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs

2 to 2-Wire: BRYANT—(Cartridge) 1922, (Plug) 62587. D. & W.—(Cartridge) 91106. G. B., CO.—(Cartridge) 34360, (Plug) 62587. NOARK—(Cartridge) 3439. PAISTE—(Cartridge) 72587, (Plug) 2587. SHAWMUT—(Cartridge) 2085. TRUMBULL—(Cartridge) 25873, (Plug) 2587. WEBER—(Plug) 62587. UNION—(Cartridge) 2025. 3 to 2-Wire: BRYANT—(Cartridge) 1923, (Plug) 62199. D. & W.—(Cartridge) 91121. G. B. CO.—(Cartridge) 34370, (Plug) 62199. NOARK—(Cartridge) 3351. PAISTE—(Cartridge) 72199, (Plug) 2199. SHAWMUT—(Cartridge) 2087. TRUMBULL—(Cartridge) 21993, (Plug) 2199. WEBER—(Plug) 62199. UNION—(Cartridge) 2027. 3 to 3-Wire: BRYANT—(Cartridge) 1928, (Plug) 62135. D. & W.—(Cartridge) 91100. G. B. CO.—(Cartridge) 34374, (Plug) 62135. NOARK—(Cartridge) 3353. PAISTE—(Cartridge) 72135, (Plug) 2135. SHAWMUT—(Cartridge) 20835. TRUMBULL—(Cartridge) 21353, (Plug) 2135. WEBER—(Plug) 62135. UNION—(Cartridge) 2029.

#### 60 Ampere, 250 Volt, Cartridge Fuse Cut-outs

- 2 to 2-Wire: BRYANT—(Cartridge) 1996. D. & W.—(Cartridge) 9113. G. E. CO.—(Cartridge) 36806. NOARK—(Cartridge) 3350. PAISTE—(Cartridge) 82587. SHAWMUT—(Cartridge) 2086. TRUMBULL—(Cartridge) 25876. UNION—(Cartridge) 2026.

  3 to 2-Wire: BRYANT—(Cartridge) 1997. G. E. CO.—(Cartridge) 36805. NOARK—(Cartridge) 3352. SHAWMUT—(Cartridge) 2088. TRUMBULL—(Cartridge) 21996. UNION—(Cartridge) 2028.

  3 to 3-Wire: BRYANT—(Cartridge) 1998. G. E. CO.—(Cartridge) 36804. NOARK—(Cartridge) 3854. SHAWMUT—(Cartridge) 20845. TRUMBULL—(Cartridge) 21356. UNION—(Cartridge) 2030.

For finishes, see note on page 91.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page 171.

Condulets of the Y series are listed on pages 119 to 129, inclusive.



## TYPE YX

For Cartridge or Plug Fuse Cut-outs

Furnished with Universal Cut-out Fastening Plate and all necessary Bolts and Screws

# TYPE YX CONDULETS-THROUGH FEED-Black Enamel Pinish

For 30 Amperes, 250 Volt, N. E. C. Double Branch Cut-outs—Cut-outs not Furnished

		_		Style of Cut-out	Siz	e in inches	1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 mains 1/2 branches	$\frac{3/4}{1/2}$ $\frac{1}{2}$ $\frac{3/4}{4}$ $\frac{3}{4}$ mains $\frac{1}{2}$ branches
	3		2	2 to -wire or 3 to 2-wire	Sta	talogue No. andard Pkg. t. Std. Pkg. st Price, ea.	15 170 lbs.	YX2112302 15 180 lbs. \$3.15
	Since the second	/		Style of Cut-out	Siz	e in inches	3/4 3/4 3/4 3/4 mains 3/4 branches	1/2 1 1/2 1" mains ½" branches
				2 to -wire or 3 to 2-wire	Sta	talogue No. andard Pkg. t. Std. Pkg. st Price, ea.	15 170 lbs.	YX3113302 10 120 lbs. \$3.30
Style of Cut-out	Size in inches	1" mains	11 mains	11" ma	ins	$1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$ mains $\frac{1}{2}$ branches	1½" mains	3/4 2 3/4 2" mains 3" branches
2 to 2-wire or 3 to 2-wire	Catalogue No. Standard Pkg. Wt. Std. Pkg. List Price, ea.	10 160 lbs.	YX4114302 10 165 lbs. \$3.70	YX4224 10 170 lbs. \$3.75		YX5115302 5 110 lbs. \$3.80	YX5335302 5 120 lbs. \$3.85	YX6226302 5 125 lbs. \$4.00
Style of Cut-out	Size in inches	$ \begin{array}{c c} 3/4 \\ 1/2 & -1/2 \\ \hline 3/4 & -1/2 \\ \hline 3/4 & mains \\ \frac{3}{4}'' & branches \end{array} $	3" mains	1" mai	ns	3/4 1 3/4 1" mains 3/4" branches	11" mains	11" mains
3 to 3-wire	Catalogue No. Standard Pkg. Wt. Std. Pkg. List Price, ea.	15	YX2222303 15 300 lbs. \$4.45	YX3113 10 220 lbs. \$4.45		YX3223303 10 230 lbs. \$4.55	YX4114303 10 240 lbs. \$4.85	YX4224303 10 240 lbs. \$4.90
Style of Cut-out	Size in inches		3/4 11/2 11/2 1½" mains	1 1½ 1½ 1½ 1½ 1½ 1½ 1½	ins	2" mains	1 1 1 2 2 2" mains	2 11/4 11/4 2" mains
3 to 3-wire	Catalogue No. Standard Pkg. Wt. Std. Pkg. List Price, ea.	YX5115303 5 130 lbs.	-	1" brane	hes 303	3" branches		14"branch's

We will furnish cut-outs for above Condulets, and the universal cut-out fastening plates, furnished, take 30 ampere cut-outs enumerated on opposite page. For finishes and assortments, see note on page 91.

Listings of type YX Condulets are continued on opposite page. Condulet reducers are listed on page 171.

Condulets of the Y series are listed on pages 119 to 129 inclusive divided by

# TYPE YX—Continued

For Cartridge or Plug Fuse Cut-outs

Furnished with Universal Cut-out Fastening Plate and all necessary Bolts and Screws

TY	PE YX CONDULETS—	THROUGH FI	EED—Black En	amel Finish-Co	ntinued
F	or 60 Ampere, 250 Volt, N. l	E. C. Double Bra	nch Cut-outs-C	ut-outs not Fur	nished
Style of Cut-out	Size in inches	3/4 1/2 1/2 3/4 in. mains 1/2 in. branches	3/4 3/4 3/4 3/4 in. mains 3/4 in. branches	1/2 1/2 1 in. mains 1/2 in. branches	3/4 1 3/4 1 in. mains 3/4 in. branche
2 to 2-wire or 3 to 2-wire	Catalogue Number Standard Package Weight Std. Pkg List Price, each	YX2112602 15 380 lbs. \$6.45	YX2222602 15 390 lbs. \$6.55	YX3113602 10 290 lbs. \$6.55	YX3223602 10 300 lbs. \$6.75
Style of Cut-out	Size in inches	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1/2 1 1/2 1 1/2 1 1/2 in. mains 1 in. branches	1 1 2 1 2 in. mains 1 in. branches	$ \begin{array}{c} 1\frac{1}{2} & \xrightarrow{2} & -1\frac{1}{2} \\ 2 \text{ in. mains} \\ 1\frac{1}{2} \text{ in. branche} \end{array} $
2 to 2-wire or 3 to 2-wire	Catalogue Number Standard Package Weight Std. Pkg List Price, each	YX4334602 10 290 lbs. \$7.25	YX5335602 5 200 lbs. \$7.45	YX6336602 5 210 lbs. \$7.55	YX6556602 5 220 lbs. \$7.70
Style of Cut-out	Size in inches	3/4 - 3/4 3/4 in. mains 3/4 in. branches	$ \begin{array}{c c} 1\\ 1/2 & 1\\ 1 & 1 \end{array} $ 1 in. mains 1/2 in. branches	3/4 1 3/4 1 in. mains 3/4 in. branches	11/4 3/4 11/4 in. main 3/4 in. branche
3 to 3-wire	Catalogue Number Standard Package Weight Std. Pkg List Price, each	YX2222603 15 530 lbs. \$8.45	YX3113603 10 380 lbs. \$8.45	YX3223603 10 390 lbs. \$8.65	YX4224603 10 400 lbs. \$8.90
Style of Cut-out	Size in inches	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1-1/2 1-1/2 11/2 in. mains 1 in. branches	1—1 2 in. mains 1 in. branches	$ \begin{array}{c c} 1\frac{1}{2} & \frac{2}{1} & -1\frac{1}{2} \\ 2 \text{ in. mains} \\ 1\frac{1}{2} \text{ in. branche} \end{array} $
3 to 3-wire	Catalogue Number Standard Package Weight Std. Pkg List Price, each	YX4334603 10 390 lbs. \$9.45	YX5335603 5 220 lbs. \$9.55	YX6336603 5 230 lbs. \$9.60	YX6556603 5 240 lbs. \$9.70

We will furnish cut-outs for Condulets listed on this and the opposite page, and the universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs:

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs
2 to 2-Wire: BRYANT—(Cartridge) 1922, (Plug) 62587. D. & W.—(Cartridge) 91106. G. E. CO.—(Cartridge) 34369, (Plug) 62587. NOARK—(Cartridge) 3349. PAISTE—(Cartridge) 72587, (Plug) 2587. SHAWMUT—(Cartridge) 2085. TRUMBULL—(Cartridge) 25873, (Plug) 2587. WEBER—(Plug) 62587. UNION—(Cartridge) 2025.
3 to 2-Wire: BRYANT—(Cartridge) 1923, (Plug) 62199. D. & W.—(Cartridge) 91121. G. E. CO.—(Cartridge) 34370, (Plug) 62199. NOARK—(Cartridge) 3351. PAISTE—(Cartridge) 72199, (Plug) 2199. SHAWMUT—(Cartridge) 2087. TRUMBULL—(Cartridge) 21993, (Plug) 2199. WEBER—(Plug) 62199. UNION—(Cartridge) 2027.

(Cartridge) 2029.

## 60 Ampere, 250 Volt, Cartridge Fuse Cut-outs

- 2 to 2-Wire: BRYANT—(Cartridge) 1996. D. & W.—(Cartridge) 91113. G. E. CO.—(Cartridge) 36806. NO-ARK—(Cartridge) 3350. PAISTE—(Cartridge) 82587. SHAWMUT—(Cartridge) 2086. TRUMBULL—(Cartridge) 25876. UNION—(Cartridge) 2026.

  3 to 2-Wire: BRYANT—(Cartridge) 1907. G. E. CO.—(Cartridge) 36805. NOARK—(Cartridge) 3352. SHAWMUT—(Cartridge) 2088. TRUMBULL—(Cartridge) 21996. UNION—(Cartridge) 2028.

  3 to 3-Wire: BRYANT—(Cartridge) 1908. G. E. CO.—(Cartridge) 36804. NOARK—(Cartridge) 3354. SHAWMUT—(Cartridge) 20845. TRUMBULL—(Cartridge) 21356. UNION—(Cartridge) 2030.

  Por finishes, see note on page 91.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Compulet reducers are listed on page 171. Condulets of the Y series are listed on pages 119 to 129, inclusive.



# CONDULETS-YK SERIES

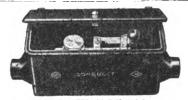
# TYPE YK

#### For Knife Switches Arranged for Cartridge or Plug Fuses

Furnished with Universal Fastening Plate and all necessary Bolts and Screws



Type YK with Type YKK Switches Installed



Type YKC with Knife Switch, arranged for Plug Puses, Installed

#### TYPE YK CONDULETS-DEAD END-Black Enamel Finish

For Knife Switches arranged for N. E. C. 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuses

		Style of Switch	Size	in inches .		1/2	3/4	1
*		2-pole	Stand Ship.	Catalogue Number Standard Package Ship. Weight, Std. Pkg List Price, each			Y K2302 10 125 lbs. \$2.95	YK3302 10 130 lbs. \$3.15
	The second of th		Size in inches			11/4	11/2	2
· Constitution (St.)		2-pole	Stand Ship.	logue Nur dard Pack Weight, S Price, eacl	age Std. Pkg	YK4302 10 140 lbs. \$3.35	YK5302 10 145 lbs. \$3.45	YK6302 10 160 lbs. \$3.60
Style of Switch	Size in inches			1/2	3/4	1	11/4	11/2
3-pole	3-pole Catalogue Number				YK2303 10 135 lbs. \$3.85	YK3303 10 140 lbs. \$4.00	YK4303 10 150 lbs. \$4.15	YK5303 10 155 lbs. \$4.30

# For Knife Switches arranged for 60 Ampere, 250 Volt, N. E. C. Fuses

Style of Switch	Size in inches	3/4	. , 1	11/4	11/2	2	
2-pole Catalogue Number		10 170 lbs.	YK3602 10 175 lbs: \$4.60	YK4602 10 180 lbs. \$4.75	YK5602 10 190 lbs. \$5.05	YK6602 10 200 lbs. \$5.25	
Style of Switch	Size in inches	3/4	1	11/4	11/2	2	
3-pole	Catalogue Number Standard Package. Shipping Weight, Std. Pkg. List Price, each	230 lbs.	YK3603 10 235 lbs. \$6.10	YK4603 10 240 lbs. \$6.45	YK5603 10 250 lbs. \$6.65	YK6603 10 260 lbs. \$6.95	

Switches are not included in above list prices, but the universal fastening plates, furnished with above Condulets, take Crouse-Hinds type YKK knife switches or the knife switches of other manufacturers, enumerated on opposite page.

Crouse-Hinds type YKK knife switches arranged for cartridge fuses are listed on page 135. We will furnish fuses.

For finishes and assortments, see note on page 91. Condulet reducers are listed on page 171. Condulets of the YK series are listed on this and the opposite page. Zeed by

#### TYPE YKC

For Knife Switches Arranged for Cartridge or Plug Fuses Furnished with Universal Fastening Plate and all necessary Bolts and Screws

#### TYPE YKC CONDULETS—THROUGH FEED—Black Enamel Finish

For Knife Switches arranged for N. E. C. 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuses

				ote, riug ruse	-		
	No. of the last of	Style of Switch	Size	e in inches	1/2	3/4	1
	•	2-pole		2-pole Catalogue No		YKC22302 10° 130 lbs. \$3.05	YKC33302 10 135 lbs. \$3.25
		Style of Switch	Size	e in inches	11/4	11/2	2
1		2-pole	Sta We	talogue No ndard Pkg ight Std. Pkg. t Price, each.	10 140 lbs.	YKC55302 10 150 lbs. \$3.60	YKC66302 10 160 lbs. \$3.80
Style of Switch	Size in inches	1/2		3/4	1	11/4	11/2
3-pole	Catalogue No Standard Pkg Weight Std. Pkg List Price, each	10 140 lbs.		YKC22303 10 145 lbs. \$4.00	YKC33303 10 150 lbs. \$4.15	YKC44303 10 160 lbs. \$4.30	YKC55303 10 170 lbs. \$4.60

#### For Knife Switches arranged for 60 Ampere, 250 Volt, N. E. C. Fuses

Style of Switch	Size in inches	3/4	1	11/4	11/2	2
2-pole	Catalogue No Standard Pkg Weight Std. Pkg List Price, each	10 180 lbs.	YKC33602 10 190 lbs. \$4.70	YKC44602 10 200 lbs. \$4.90	YKC55602 10 210 lbs. \$5.15	YKC66602 10 220 lbs. \$5.45
Style of Switch	Size in inches	3/4	1	11/4	11/2	2
_	Catalogue No					

Important Information Concerning Condulets Listed on This and the Opposite Page Switches are not included in above list prices, but the universal fastening plates, furnished with Condulets of the YK series, take Crouse-Hinds type YKK knife switches or the knife switches of other manufacturers, as follows:

Switches Arranged for 30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuses 2-Pole: CROUSE-HINDS—(Cartridge) YKK302. BRYANT—(Plug) 1695, 1981. CONN. ELBC.—(Plug) 01502. D. & W.—(Plug) 25028. G. E. CO.—(Plug) 42869. PAISTE—(Plug) 4014, 4016. TRUMBULL—(Cartridge) 704, 724. (Plug) 701, 721.
3-Pole: CROUSE-HINDS—(Cartridge) YKK303. BRYANT—(Plug) 1986. PAISTE—(Cartridge) 4033, (Plug)

104, 224, (Flug) 701, 721. le: CROUSE-HINDS—(Cartridge) YKK303. BRYANT—(Plug) 1986. PAISTE—(Cartridge) 4033, (Plug) 4025, 4029. TRUMBULL—(Cartridge) 725, (Plug) 723.

Switches Arranged for 60 Ampere, 250 Volt, Cartridge Fuses

2-Pole: CROUSE-HINDS—(Cartridge) YKK602. PAISTE—(Cartridge) 5151.
3-Pole: CROUSE-HINDS—(Cartridge) YKK603. PAISTE—(Cartridge) 5153.

Crouse-Hinds type YKK knife switches arranged for cartridge fuses are listed on page 135.

We will furnish fuses.

For finishes, see page 91.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page 171.

Condulets of the YK series are listed on this and the opposite page.

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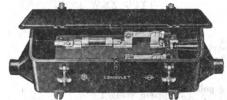
#### CONDULETS-YKW SERIES

## TYPE YKW

Water-Tight—For Knife Switches Arranged for Cartridge or Plug Fuses
Furnished with Universal Fastening Plate, Gasket and all necessary Bolts and Screws







Type YLWC with Type B Switch, Arranged for Cartridge Fuses, Installed

## TYPE YKW CONDULETS-DEAD END-Black Enamel Finish

For Knife Switches Arranged for N. E. C. 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuses

-	- A4	Style of Switch	Size in incl	nes	1/2	3/4	1
		2-pole		Catalogue Number Standard Package Weight Std. Pkg List Price, each		YKW2302 10 185 lbs. \$6.70	YKW3302 10 190 lbs. \$6.80
15	7.	Style of Switch	Size in inch	nes	11/4	11/2	2
40	do	2-pole	Standard F Weight Sto	Number Package l. Pkg each	10 195 lbs.	YKW5302 10 200 lbs. \$7.00	YKW6302 10 210 lbs. \$7.10
Style of Switch	Size in inches		1/2	3/4	1	11/4	11/2
3-pole	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each		YKW1303 10 240 lbs. \$8.50	YKW2303 10 245 lbs. \$8.60	YKW3303 10 250 lbs. \$8.70	YKW4303 10 260 lbs. \$8.80	YKW5303 10 265 lbs. \$8.90

#### For Knife Switches Arranged for 60 Ampere, 250 Volt, N. E. C. Puses

Style of Switch	Size in inches	3/4	1	11/4	11/2	2
2-pole	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	YKW2602 10 270 lbs. \$8.80	YKW3602 10 275 lbs. \$8.90	YKW4602 10 280 lbs. \$9.00	YKW5602 10 290 lbs. \$9.10	YKW6602 10 300 lbs. \$9.20
Style of Switch	Size in inches	3/4	1	11/4	11/2	2
3-pole	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	300 lbs.	YKW3603 10 305 lbs. \$9.50	YKW4603 10 310 lbs. \$9.60	YKW5603 10 315 lbs. \$9.70	YKW6603 10 320 lbs. \$9.80

Switches are not included in above list prices, but the universal fastening plates, furnished with above Condulets, take Crouse-Hinds type YKK knife switches or the knife switches of other manufacturers, enumerated on opposite page.

Grouse-Hinds type YKK knife switches arranged for cartridge fuses are listed on page 135. Padlock is not included in above list prices. Condulet reducers are listed on page 171. For finishes and assortments, see note on page 91.

We will furnish fuses.

Listings of type YKW Condulets are continued on opposite page. Condulets of the YKW series are listed on pages 132 to 135, inclusive.



# TYPE YKW—Continued

Water-Tight-For Knife Switches Arranged for Cartridge Fuses

Condulets Listed Below are not arranged for Universal Fastening Plates, but are furnished with all necessary Screws to Fasten Switches direct to Condulets

#### TYPE YKW CONDULETS-DEAD END-Black Enamel Finish

#### For Knife Switches arranged for 100 Ampere, 250 Volt. N. E. C. Fuses

Style of Switch	Size in inches	1	11/4	11/2	2
2-pole	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	5	YKW41002 5 255 lbs. \$16.80	YKW51002 5 260 lbs. \$17.00	YKW61002 5 270 lbs. \$17.20
Style of Switch	Size in inches	11/4	11/2	2	21/2
3-pole	Catalogue Number	YKW41003 5 340 lbs. \$20.60	YKW51003 5 345 lbs. \$20.80	YKW61003 5 350 lbs. \$21.00	YKW71003 5 355 lbs. \$21.20

#### For Knife Switches arranged for 200 Ampere, 250 Volt, N. E. C. Fuses

Style of Switch	Size in inches	11/2	2	21/2	3
2-pole	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	YKW52002 5 360 lbs. \$24.00	YKW62002 5 365 lbs. \$24.40	YKW72002 5 375 lbs. \$24.80	YKW82002 5 380 lbs. \$25.20
Style of Switch	Size in inches	11/2	2	21/2	3
3-pole	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	YKW52003 5 500 lbs. \$30.80	YKW62003 5 510 lbs. \$31.20	YKW72003 5 520 lbs. \$31.60	YKW82003 5 530 lbs. \$32.00

# Important Information Concerning Condulets Listed on This and the Opposite Page

The universal fastening plates, furnished with Condulets listed on the opposite page, take Crouse-Hinds type YKK knife switches or knife switches of other manufacturers, as follows:

Switches Arranged for 30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuses

2-Pole: CROUSE-HINDS—(Cartridge) YKK302. BRYANT—(Plug) 1695, 1981. CONN. ELEC.—(Plug) 01502.
 D. & W.—(Plug) 25028. G. B. CO.—(Plug) 42869. PAISTE—(Plug) 4014, 4016. TRUMBULL—(Cartridge) 704, 724. (Plug) 701, 721.
 3-Pole: CROUSE-HINDS—(Cartridge) YKK303. BRYANT—(Plug) 1986. PAISTE—(Cartridge) 4033, (Plug)

sie: CROUSE-HINDS—(Cartridge) YKK303. BRYAN 4025, 4029. TRUMBULL—(Cartridge) 725, (Plug) 723.

#### Switches Arranged for 60 Ampere, 250 Volt, Cartridge Fuses

2-Pole: CROUSE-HINDS—(Cartridge) YKK602. PAISTE—(Cartridge) 5151.
3-Pole: CROUSE-HINDS—(Cartridge) YKK603. PAISTE—(Cartridge) 5153.

Switches are not included in list prices on this page, but Condulets listed on this page take 100 or 200 ampere, Crouse-Hinds type B knife switches with high clips or knife switches of other manufacturers, as follows:

#### Switches Arranged for 100 Ampere, 250 Volt, Cartridge Fuses

2-Pole: CROUSE-HINDS—(Cartridge) 31364—Specify high clips.
Switches conforming with dimensions given on page 135.

OTHER MANUFACTURERS—(Cartridge) Support of the clips.
Switches conforming with dimensions given on page 135.

Switches Arranged for 200 Ampere, 250 Volt, Cartridge Fuses

cole: CROUSE-HINDS—(Cartridge) 31366—Specify high clips. OTHER MANUFACTURERS—(Cartridge) Switches conforming with dimensions given on page 135.

de: CROUSE-HINDS—(Cartridge) 31486—Specify high clips. OTHER MANUFACTURERS—(Cartridge) Switches conforming with dimensions given on page 135. 3-Pole:

Crouse-Hinds type YKK knife switches arranged for cartridge fuses are listed on page 135. Crouse-Hinds type B knife switches with high clips arranged for cartridge fuses are enumerated on page 135 and listed in Grouse-Hinds Knife Switch Bulletin. Padlock is not included in above list prices, but will be furnished extra, if specified.

For finishes and assortments, see note on page 91.

Condulet reducers are listed on page 171. We will furnish fuses.

Condulets of the YKW series are listed on pages 132 to 135, inclusive.



# CONDULETS-YKW SERIES-Continued TYPE YKWC

Water-Tight-For Knife Switches Arranged for Cartridge or Plug Fuses Furnished with Universal Fastening Plate, Gasket and all necessary Bolts and Screws

#### TYPE YKWC CONDULETS-THROUGH FEED-Black Enamel Finish

For Knife Switches arranged for N. E. C. 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuses

			120	voit, i lug i uat	-0		
		Style of Switch	Size	in inches	1/2	3/4	1
4			Star	alogue No ndard Pkg ght Std. Pkg. Price, each.	190 lbs.	YKWC22302 10 195 lbs. \$6.85	YKWC33302 10 200 lbs. \$6.95
		Style of Switch	Size	in inches	11/4	11/2	2
		2-pole	Catalogue No Standard Pkg Weight Std. Pkg. List Price, each.		10 205 lbs.	YKWC55302 10 210 lbs. \$7.15	YKWC66302 10 215 lbs. \$7.25
Style of Switch	Size in inches	1/2		3/4	1	• 11/4	11/2
3-pole	Catalogue Number. Standard Package Weight Std. Pkg List Price, each	10 240 lbs.		YKWC22303 10 245 lbs. \$8.70	YKWC33303 10 250 lbs. \$8.80	YKWC44303 10 255 lbs. \$8.90	YKWC55303 10 260 lbs. \$9.00
	For Knife Swit	iches arri	inge	l for 60 Amper	e, 250 Volt, N.	E. C. Fuses	
Style of Switch	Size in inches	3/4		1	11/4	11/2	2
2-pole	Catalogue Number. Standard Package Weight Std. Pkg List Price, each	10 260 lbs.	2602	YKWC33602 10 265 lbs. \$9.10	YKWC44602 10 270 lbs. \$9.20	YKWC55602 10 275 lbs. \$9.30	YKWC66602 10 280 lbs. \$9.40
Style of Switch	Size in inches	3/4		1	11/4	11/2	2
3-pole	Catalogue Number. Standard Package Weight Std. Pkg List Price, each	10 285 lbs.	22603	YKWC33603 10 290 lbs. \$9.70	YKWC44603 10 295 lbs. \$9.80	YKWC55603 10 300 lbs. \$9.90	YKWC66603 10 305 lbs. \$10.00

Important Information Concerning Condulets Listed on This Page Switches are not included in above list prices, but the universal fastening plates, furnished with above Condulets, take Crouse-Hinds type YKK knife switches or knife switches of other manufacturers, as follows:

Switches Arranged for 30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuses 2-Pole: CROUSE-HINDS—(Cartridge) YKK302. BRYANT—(Plug) 1695, 1981. CONN. BLEC.—(Plug) 01502. D. & W.—(Plug) 25028. G. B. CO.—(Plug) 42869. PAISTE—(Plug) 4014, 4016. TRUMBULL—(Cartridge) 704, 724, (Plug) 701, 721.
3-Pole: CROUSE-HINDS—(Cartridge) YKK303. BRYANT—(Plug) 1986. PAISTE—(Cartridge) 4033, (Plug) 4025, 4029. TRUMBULL—(Cartridge) 725, (Plug) 723.

Switches Arranged for 60 Ampere, 250 Volt, Cartridge Fuses

2-Pole: CROUSE-HINDS—(Cartridge) YKK602. PAISTE—(Cartridge) 5151.
3-Pole: CROUSE-HINDS—(Cartridge) YKK603. PAISTE—(Cartridge) 5153.
Crouse-Hinds type YKK knife switches arranged for cartridge fuses are listed on page 135.

We will furnish fuses.

Padlock is not included in above list prices.

For finishes, see note on page 91.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page 171.

Condulets of the YKW series are listed on pages 132 to 135, inclusive  $\operatorname{dom} \operatorname{\mathsf{Loog}} \mathcal{C}$  .

## TYPE YKWC—Continued

Water-Tight-For Knife Switches Arranged for Cartridge Fuses

Condulets Listed Below are not arranged for Universal Fastening Plates, but are furnished with Gasket and all necessary Screws to Fasten Switches direct to Condulets

# TYPE YKWC CONDULETS—THROUGH FEED—Black Enamel Finish For Knife Switches arranged for 100 Ampere, 250 Volt, N. E. C. Fuses

Style of Switch	Size in inches	1	11/4	11/2	2
2-pole	Catalogue No Standard Pkg Wt. Std. Pkg List Price, ea	5 260 lbs.	YKWC441002 5 265 lbs. \$17.40	YKWC551002 5 270 lbs. \$17.80	YKWC661002 5 285 lbs. \$18.20
Style of Switch	Size in inches	11/4	11/2	2	21/2
3-pole	Catalogue No Standard Pkg Wt. Std. Pkg List Price, ea	5 340 lbs.	YKWC551003 5 345 lbs. \$21.90	YKWC661003 5 360 lbs. \$22.30	YKWC771003 5 375 lbs. \$22.70

#### For Knife Switches arranged for 200 Ampere, 250 Volt, N. E. C. Fuses

Style of Switch	Size in inches	11/2	2	21/2	3
2-pole	Catalogue No Standard Pkg Wt. Std. Pkg List Price, ea	375 lbs.	YKWC662002 5 385 lbs. \$25.50	YKWC772002 5 395 lbs. \$26.00	YKWC882002 5 410 lbs. \$26.50
Style of Switch	Size in inches	11/2	2	21/2	3
3-pole	Catalogue No Standard Pkg Wt. Std. Pkg List Price, ea	5 490 lbs.	YKWC662003 5 500 lbs. \$33.00	YKWC772003 5 510 lbs. \$33.50	YKWC882003 5 520 lbs. \$34.00

Switches are not included in list prices, but Condulets listed on this page take Crouse-Hinds type
B knife switches with high clips enumerated below, or other switches that
conform with dimensions specified below

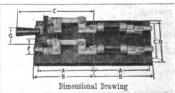
# KNIFE SWITCHES FOR CONDULETS OF THE YK AND YKW SERIES Arranged for N. E. C. Cartridge Fuses-250 Volts







Type B Switch



	Cro	use-Hinds	Type YKK K	nife	Switches		Switches o	of Othe	er Man	ufactu	irers
	30 Amp.	60 Amp.	Capacity		30 Amp.	60 Amp.	Style	2-P	ole	3-P	ole
2-	YKK302 10	YKK602	2 Cat. No. Std. Pkg.	3-	YKK303 10	YKK603 10	Capacity	100 Amp.	200 Amp.	100 Amp.	200 Amp.
pole	\$2.25	\$3.50	Price, ea.	pole	\$3.75	\$5.25	A (Fixed) B (Max.)	71" 91"	85" 105"	7½" 9½"	85" 101"
	Cı	ouse-Hin	ds Type B Kr	ife S	witches	1	C (Fixed)	51"	53"	83"	$9\frac{3}{4}$ " $11$ "
	100Amp.	200Amp.	Capacity		100Amp	. 200Amp.	D (Max.) E (Max.)	101"	117"	10"	117"
2-	31364*	31366*	Cat. No.	3-			F (Max.†)	43"		43"	61"
pole	See Knife Sw	ritch Bulletin	List Price, ea	. pol	e See Knife S	witch Bulletin	G (Max.t)	51"	$6\frac{3}{4}''$	51"	63"

<sup>\*</sup>Specify high clips when ordering.

For finishes and assortments of Condulets, see note on page 91.

We will furnish fuses.

Condulets of the YKW series are listed on pages 132 to 135, inclusive.

<sup>†</sup>From bottom of slate base to highest point of clip. ‡From bottom of slate base to highest point of handle.

handle.

Any switch with dimensions not exceeding those specified "maximum" and with dimensions the same as those specified "fixed," in above schedule, will fit Condulets of corresponding classification in the XKW series

#### CONDULETS-Z SERIES

# TYPES Z, ZC, ZL, ZR, ZS, ZU, ZD, AND ZX

For Cartridge or Plug Fuse Cut-outs and Snap or Pull Switches

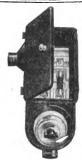
Furnished with Universal Cut-out Fastening Plate, Adjustable Bar and Adapting Rings for Switches and all necessary Bolts and Screws



Type ZL With Snap Switch and Plug Puse Cut-out Installed



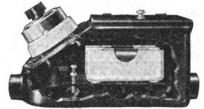
Type ZU
With Snap Switches and Cartridge Fuse Cut-out Installed



Type ZR With Snap Switch and Cartridge Fuse Cut-out Installed



Type Z8
With Snap Switch and Plug Fuse
Cut-out Installed



Type ZC
With Snap Switch and Cartridge Fuse Cut-out Installed
(Broken-away View, Showing Cut-out)



Type Z With Snap Switch and Cartridge Puse Cut-out Installed



Type ZD
With Snap Switches and Cartridge Fuse Cut-out Installed



Type ZX
With Snap Switches and Plug Fuse Cut-out Installed

#### TYPE Z CONDULETS-DEAD END-Black Enamel Finish

For 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuse N. E. C. Main Line Cut-outs and 5, 10 or 20 Ampere Switches—Cut-outs and Switches not Furnished

JHG-71m	Style of Cut-out	Size in inches,	1/2	3/4	1
	2-wire	Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	Z1302 15 120 lbs. \$2.55	Z2302 15 125 lbs. \$2.65	Z3302 10 85 lbs. \$2.75
	Style of Cut-out	Size in inches	1/2	3/4	1
-QEAON I	3-wire	Catalogue Number Standard Package Ship. Wt. Std. Pkg List Price, each	Z1303- 15 145 lbs. \$3.00	Z2303 15 150 lbs. \$3.10	Z3303 10 105 lbs. \$3.20

For important information concerning Condulets listed above, see notes on page 105. Condulet reducers are listed on page 171.

Listings of type Z Condulets are continued on opposite page.

Condulets of the Z series are listed on pages 136 to 143, inclusive Digitized by

# TYPE Z—Continued—AND TYPE ZC

For Cartridge or Plug Fuse Cut-outs and Snap or Pull Switches
Furnished with Universal Cut-out Fastening Plate, Adjustable Bar and Adapting Rings
for Switches and all necessary Bolts and Screws

#### TYPE Z CONDULETS-DEAD END-Black Enamel Finish-Continued

For 30 Ampere, 600 Volt, N. E. C. Main Line Cut-outs and 5, 10 or 20 Ampere Switches—Cut-outs and Switches not Furnished

Style of Cut-out		3/4	1	Size in inches	Style of Cut-out	1
1-wire	Z13016 15 210 lbs. \$4.30	Z23016 15 220 lbs. \$4.40	10 150 lbs.	Catalogue No Standard Pkg Weight Std. Pkg List Price, each	3-wire	Z33036 10 205 lbs. \$5.90

### TYPE ZC CONDULETS-THROUGH FEED-Black Enamel Finish

For 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuse N. E. C. Main Line Cut-outs and 5, 10 or 20 Ampere Switches—Cut-outs and Switches not Furnished

		Style of Cut-out	Size	in inches		1/21/2	3/4-3/4	11
1)		2-wire	Sta We	ndard Packight Std. P	mber kage kg	15 125 lbs.	ZC22302 15 130 lbs. \$2.90	ZC33302 10 90 lbs. \$3.00
		Style of Cut-out				11/411/4	11/2-11/2	22
	Success &	2-wire	Sta	ndard Packight Std. P	mber kage lkg	10 95 lbs.	ZC55302 5 55 lbs. \$3.20	ZC66302 5 60 lbs. \$3.30
Style of Cut-out	Size in inches	. 1/2-	-1/2	3/43/4	11	11/411/4	11/2-11/2	22
3-wire	Catalogue No Standard Pkg Weight Std. Pkg List Price, each	. 15 . 145 lbs.		ZC22303 15 150 lbs. \$3.35	ZC33303 10 105 lbs. \$3.45	ZC44303 10 110 lbs. \$3.55	ZC55303 5 60 lbs. \$3.65	ZC66303 5 65 lbs. \$3.75

For 30 Ampere, 600 Volt, N. E. C. Main Line Cut-outs and 5, 10 or 20 Ampere Switches—Cut-outs and Switches not Furnished

Style of Cut-out	1/21/2	3/43/4	11	Size, inches.	Style of Cut-out	1/21/2	3/43/4	11
1-wire	ZC113016 15 230 lbs. \$4.60	ZC223016 15 235 lbs. \$4.70	10	Cat. No Std. Pkg Wt.Std. Pkg. List, each	\ •!	ZC113036 15 290 lbs. \$6.80	ZC223036 15 295 lbs. \$6.90	ZC333036 10 210 lbs. \$7.00

We will furnish switches for Condulets listed on this and the opposite page, and the adjustable bar, furnished with each Condulet, permits the proper mounting of any snap or pull switch enumerated on page 62 or 63.

Adapting rings, furnished with the Condulets, are required in mounting 5 or 10 ampere switches. No adapting ring is required in mounting a 20 ampere switch.

We will furnish cut-outs for Condulets listed on this and the opposite page, but the universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs:

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs

2-Wire: BRYANT—(Cartridge) 1917, (Plug) 62965. D. & W.—(Cartridge) 91102. G. B. CO.—(Cartridge) 34367, (Plug) 62965. NOARK—(Cartridge) 3327. PAISTE—(Cartridge) 72965, (Plug) 2965. SHAWMUT—(Cartridge) 2077. TRUMBULL—(Cartridge) 29653, (Plug) 2965. WEBER—(Plug) 62965. UNION—(Cartridge) 2010.

3-Wire: BRYANT—(Cartridge) 1924, (Plug) 62165. D. & W.—(Cartridge) 91103. G. B. CO.—(Cartridge) 34372, (Plug) 62165. NOARK—(Cartridge) 3328. PAISTE—(Cartridge) 72165, (Plug) 2165. SHAWMUT—(Cartridge) 2079. TRUMBULL—(Cartridge) 21653, (Plug) 2165. WBEER—(Plug) 62165. UNION—(Cartridge) 2012. 30 Ampere, 600 Volt, Cartridge Fuse Cut-outs

1-Wire: BRYANT—(Cartridge) 1937. D. & W.—(Cartridge) 28076. G. B. CO.—(Cartridge) 34991. NOARE—(Cartridge) 5600. SHAWMUT—(Cartridge) 20735. UNION—(Cartridge) 4003.

3-Wire: Mount three 1-wire cut-outs, side by side.

For finishes and assortments, see note on page 91.

Condulet reducers are listed on page 171.

Condulets of the Z series are listed on pages 136 to 143, inclusive.

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# TYPES ZL AND ZR

For Cartridge or Plug Fuse Cut-outs and Snap or Pull Switches Furnished with Universal Cut-out Fastening Plate, Adjustable Bar and Adapting Ring for Switches and all necessary Bolts and Screws

# TYPE ZL CONDULETS-THROUGH FEED-Black Enamel Finish

For 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuse N. E. C. Main Line or Single Branch Cut-outs and 5, 10 or 20 Ampere Switches—Cut-outs and Switches not Furnished

1	Style of Cut-out	Size in inches	1/2	3/4	1
	2-wire	Catalogue Number Standard Package Weight Std. Pkg List Price, each	ZL11302 15 150 lbs. \$3.15	ZL22302 15 155 lbs. \$3.25	ZL33302 10 110 lbs. \$3.35
	Style of Cut-out	Size in inches	1/2	3/4	1
	3-wire	Catalogue Number Standard Package Weight Std. Pkg List Price, each	ZL11303 15 170 lbs. \$3.65	ZL22303 15 175 lbs: \$3.75	ZL33303 10 125 lbs. \$3.85

#### TYPE ZR CONDULETS-THROUGH FEED-Black Enamel Finish

For 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuse N. E. C. Main Line or Single Branch Cut-outs and 5, 10 or 20 Ampere Switches—Cut-outs and Switches not Furnished

	Style of Cut-out	Size in inches	1/2	3/4	11
6. I	2-wire	Catalogue Number Standard Package Weight Std. Pkg List Price, each	ZR11302 15 150 lbs. \$3.15	ZR22302 15 155 lbs. \$3.25	ZR33302 10 110 lbs. \$3.35
	Style of Cut-out	Size in inches	1/2	3/4	11
	3-wire	Catalogue Number Standard Package Weight Std. Pkg List Price, each	ZR11303 15 170 lbs. \$3.65	ZR22303 15 175 lbs. \$3.75	ZR33303 10 125 lbs. \$3.85

We will furnish switches for Condulets listed above, and the adjustable bar, furnished with each Condulet, permits the mounting of any snap or pull switch enumerated on page 62 or 63.

Adapting rings, furnished with the Condulets, are required in mounting 5 or 10 ampere switches. No adapting ring is required in mounting a 20 ampere switch.

We will furnish cut-outs for Condulets listed above, and the universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs:

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Main Line Cut-outs
2-Wire: BRYANT—(Cartridge) 1917, (Plug) 62965. D. & W.—(Cartridge) 9102. G. E. CO.—(Cartridge) 34367, (Plug) 62965. NOARK—(Cartridge) 3327. PAISTE—(Cartridge) 2905, (Plug) 2965. SHAWMUT—(Cartridge) 2017. TRUMBULL—(Cartridge) 29653, (Plug) 2965. WEBER—(Plug) 62965. UNION—(Cartridge) 2010.

—(Cartridge) 2010.

(Cartridge) 2010.

ire: BRYANT—(Cartridge) 1924, (Plug) 62165. D. & W.—(Cartridge) 91103. G. E. CO.—(Cartridge) 34372, (Plug) 62165. NOARK—(Cartridge) 3328. PAISTE—(Cartridge) 72165, (Plug) 2165. SHAWMUT—(Cartridge) 2079. TRUMBULL—(Cartridge) 21653, (Plug) 2165. WEBER—(Plug) 62165. UNION—(Cartridge) 21653.

2012.
30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Single Branch Cut-outs
2 to 2-Wire: BRYANT—(Cartridge) 1919, (Plug) 61935. D. & W.—(Cartridge) 91104. G. E. CO.—(Cartridge) 43488, (Plug) 61935. NOARK—(Cartridge) 3345. PAISTE—(Cartridge) 71935. (Plug) 1935. SHAWMUT
—(Cartridge) 2081., TRUMBULL—(Cartridge) 19353, (Plug) 1935. WEBER—(Plug) 61935. UNION—

4365, (Plug) 1935. NOAKE—(Cartridge) 3345. FAISTE—(Cartridge) /1935. (Plug) 1935. SHAWMUT—(Cartridge) 2081., TRUMBULL—(Cartridge) 1935., (Plug) 1935. WEBER—(Plug) 61935. UNION—(Cartridge) 2020.

3 to 3-Wire: BRYANT—(Cartridge) 1926, (Plug) 8042. D. & W.—(Cartridge) 9105. G. E. CO.—(Cartridge) 34373, (Plug) 8042. NOAKE—(Cartridge) 3346. PAISTE—(Cartridge) 78042, (Plug) 8042. SHAWMUT—(Cartridge) 2083. TRUMBULL—(Cartridge) 80423, (Plug) 8042. WEBER—(Plug) 8042. UNION—(Cartridge) 2022.

For finishes, see page 91.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page 171.

Condulets of the Z series are listed on pages 136 to 143, inclusive. Digitized by

## TYPE ZS

For Cartridge or Plug Fuse Cut-outs and Snap or Pull Switches Furnished with Universal Cut-out Fastening Plate, Adjustable Bar and Adapting Ring for Switches and all necessary Bolts and Screws

## TYPE ZS CONDULETS-THROUGH FEED-Black Enamel Finish

For 30 Amperc, 250 Volt, Cartridge or 30 Amperc, 125 Volt, Plug Fuse N E. C. Single Branch Cut-outs and 5, 10 or 20 Amperc Switches—Cut-outs and Switches not Furnished

	and 5, 10 or	zu ampere s	witches-Cut	-outs and sv	A 10CHER DOLL	urnisaea	
		Style of Cut-out	Size in inc		1/2	3/4 1/2—3/4 1 in. mains 1 in. branch ZS212302 15	3/4 3/4 3 in. mains 3 in. branch ZS222302
P		2 to 2-wire	Weight Sto List Price,	d. Pkg	160 lbs \$3.35	165 lbs. \$3.45	170 lbs. \$3.50
Style of Cut-out		1/2	1	11/4	3/4	11/2	3/4
			1 in. branch	1; in. mains ; in. branch	3 in. branch	½ in. branch	in. branch
2 to 2-wire	Catalogue No Standard Pkg Weight Std. Pkg. List Price, each.		ZS333302 10 125 lbs. \$3.60	ZS414302 10 130 lbs. \$3.65	ZS424302 10 135 lbs. \$3.75	ZS515302 5 75 lbs. \$3.85	ZS525302 5 80 lbs. \$3.95
Style of Cut-out		1/2 1/2 1/2 1/2 1/2 in mains	1/2 3/4 3/4 in mains		1/2 1 1 in mains		
3 to 3-wire	Catalogue No Standard Pkg Weight Std. Pkg. List Price, each	ZS111303 15	in. branch ZS212303 15 185 lbs. \$3.75	7 in. branch 7 2 2 2 2 3 0 3 15 190 lbs. \$3.80	½ in. branch ZS313303 10 135 lbs. \$3.85	‡ in. branch ZS323303 10 140 lbs. \$3.90	ZS333303 10 145 lbs. \$4.00
Style of Cut-out		11/4 1/2 11/4 11/4 in. mains 1/4 in. branch	34-11/4 1} in mains	1½ 1½ 1½ 1½ in. mains ½ in. branch	34-11/2 13 in mains	2 3/4————————————————————————————————————	11/4 2 2 in. mains 1½in.branch
3 to 3-wire	Catalogue No Standard Pkg Weight Std. Pkg. List Price, each	ZS414303 10 150 lbs. \$4.00	ZS424303 10 155 lbs. \$4.10	ZS515303 5 80 lbs. \$4.25	ZS525303 5 80 lbs. \$4.35	ZS626303 5 85 lbs. \$4.45	ZS646303 5 90 lbs. \$4.65

We will furnish switches for Condulets listed above, and the adjustable bar, furnished with each Condulet, permits the mounting of any snap or pull switch enumerated on page 62 or 63.

Adapting rings, furnished with the Condulets, are required in mounting 5 or 10 ampere switches. No adapting ring is required in mounting a 20 ampere switch.

We will furnish cut-outs for Condulets listed above, and the universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs:

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs

2 to 2-Wire: BRYANT—(Cartridge) 1919, (Plug) 61935. D. & W.—(Cartridge) 91104. G. B. CO.—(Cartridge) 34368, (Plug) 61935. NOARK—(Cartridge) 3345. PAISTE—(Cartridge) 71935, (Plug) 1935. SHAWMUT—(Cartridge) 2081. TRUMBULL—(Cartridge) 19353, (Plug) 1935. WEBER—(Plug) 61935. UNION—(Cartridge) 2081.

34305, (Flug) 61935. NOARK—(Cartridge) 3343. PAISTE—(Cartridge) 71935, (Plug) 1935. SHAWMUI—
(Cartridge) 2020. TRUMBULL—(Cartridge) 19353, (Plug) 1935. WEBER—(Plug) 61935. UNION—(Cartridge) 2020. 
3 to 3-Wire: BRYANT—(Cartridge) 1926, (Plug) 8042. D. & W.—(Cartridge) 91105. G. E. CO.—(Cartridge) 34373, (Plug) 8042. NOARK—(Cartridge) 3346. PAISTE—(Cartridge) 71935, (Plug) 61935. UNION—(Cartridge) 2023. TRUMBULL—(Cartridge) 8042. D. & W.—(Cartridge) 71935, (Plug) 61935. UNION—(Cartridge) 2020.

For finishes, see note on page 91.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page 171.

Condulets of the Z series are listed on pages 136 to 143, inclusive.

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## TYPE ZU\*

For Cartridge or Plug Fuse Cut-outs and Snap or Pull Switches Furnished with Universal Cut-out Fastening Plate, Adjustable Bars and Adapting Rings for Switches and all necessary Bolts and Screws

#### TYPE ZU CONDULETS—Black Enamel Finish

For 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug N. E. C. Double Branch Cut-outs and 5, 10 or 20 Ampere Switches-Cut-outs and Switches not Furnished

4		Style of Cut-out	Size in inches		1/2 ½ in. main	1/2 1/2 3/4 3/4 in. main ½ in. branches
		2 to 2-wire or 3 to 2-wire	Catalogue N Standard Pa Shipping We List Price, es	ckage ight Std.Pkg.	\$4.70	ZU121302 15 205 lbs. \$4.80
		Style of Cut-out	Size in inche	s	3/4 3/4 in. main	$\begin{array}{c c} 1/2 & 1/2 \\ \hline & 1 \\ 1 & \text{in. main} \\ \frac{1}{2} & \text{in. branches} \end{array}$
		2 to 2-wire or 3 to 2-wire	Standard Pa Shipping We	umber ckage ight Std. Pkg. ach	ZU222302 15 210 lbs. \$4.90	ZU131302 10 105 lbs. \$5.00
Style of Cut-out	Size in inches	1 in. main	1½ ½ ½ 1½ 1¼ 1½ in. main ½ in. branches	1 <sup>1</sup> / <sub>4</sub> 1 <sup>1</sup> / <sub>4</sub> in. main <sup>3</sup> / <sub>4</sub> in. branches	11/4 11/4 in. main	$\begin{array}{c c} 1/2 & 1/2 \\ \hline & 11/2 \\ \hline & 1\frac{1}{2} \text{ in. main} \\ \frac{1}{2} \text{ in. branches} \end{array}$
2 to 2-wire or 3 to 2-wire	Catalogue No Standard Package Weight Std. Pkg List Price, each	ZU232302 10 110 lbs. \$5.10	ZU141302 10 110 lbs. \$5.20	ZU242302 10 115 lbs. \$5.30	ZU343302 10 120 lbs. \$5.40	ZU151302 5 90 lbs. \$5,50
Style of Cut-out	Size in inches	3/4 11/2 1½ in. main ¾ in. branches	$1$ $1^{1}/2$ $1^{\frac{1}{2}}$ in. main 1 in. branches	2 2 in. main	3/4 3/4 1 2 2 in. main 3/4 in. branches	2 2 in. main
2 to 2-wire or 3 to 2-wire	Catalogue No Standard Package Weight Std. Pkg List Price, each	ZU252302 5 125 lbs. \$5.60	ZU353302 5 130 lbs. \$5.70	ZU161302 5 130 lbs. \$5.80	ZU262302 5 135 lbs. \$5.90	ZU363302 5 140 lbs. \$6.00

\*These Condulets can be furnished with covers hinged on side opposite switches, and then have the letter E inserted after U in catalogue number, as ZUE111302.

Important Information Concerning Condulets Listed on This Page

We will furnish switches for Condulets listed above, and the adjustable bars, furnished with each Condulet, permit the proper mounting of any snap or pull switch enumerated on page 62 or 63.

Adapting rings, furnished with the Condulets, are required in mounting 5 or 10 ampere switches. No adapting ring is required in mounting a 20 ampere switch.

We will furnish cut-outs for Condulets listed above, and the universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs.

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs

2-Wire: BRYANT—(Cartridge) 1922, (Plug) 62587. D. & W.—(Cartridge) 91106. G. E. CO.—(Cartridge) 34369, (Plug) 62587. NOARK—(Cartridge) 3349. PAISTE—(Cartridge) 72587, (Plug) 2587. SHAWMUT—(Cartridge) 2085. TRUMBULL—(Cartridge) 25873, (Plug) 2587. WEBER—(Plug) 62587. UNION—(Cartridge) 2025.

Condulet reducers are listed on page 171.

Listings of type ZU Condulets are continued on opposite page.

Condulets of the Z series are listed on pages 136 to 143, inclusive. Digitized by



## TYPE ZU\*—Continued

For Cartridge or Plug Fuse Cut-outs and Snap or Pull Switches

Furnished with Universal Cut-out Fastening Plate, Adjustable Bars and Adapting

Rings for Switches and all necessary Bolts and Screws

#### TYPE ZU CONDULETS-Black Enamel Finish-Continued

For 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuse N. E. C. Double Branch Cut-outs and 5, 10 or 20 Ampere Switches—Cut-outs and Switches not Furnished

and 5, 10 or 20 Ampere Switches—Cut-outs and Switches not Furnished									
Style of Cut-out	Size in inches	1/2 1/2 in. main	3/4 3/4 in. main	34 34 34 34 in. main 34 in. branches	1/2 1/2 1 1 in. main 1/2 in. branches				
3 to 3-wire	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	ZU111303 15 210 lbs. \$5.70	ZU121303 15 215 lbs. \$5.80	ZU222303 15 220 lbs. \$5.90	ZU131303 10 155 lbs. \$6.00				
Style of Cut-out	Size in inches	3/4 3/4 1 in. main. 3/4 in. branches	1 1 in. main	11/4 11/4 in. main	11/4 11/4 in. main 3/4 in. branches				
3 to 3-wire	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	ZU232303 10 160 lbs. \$6.10	ZU333303 10 165 lbs. \$6.15	ZU141303 10 160 lbs. • \$6.20	ZU242303 10 170 lbs. \$6.30				
Style of Cut-out	Size in inches	11/4 11/4 in. main	11/4 11/4 11/4 in. main 11/4 in. branches	1½ ½ 1½ 1½ 1½ in. main ½ in. branches	1½ 1½ 1½ in. main ¾ in. branches				
3 to 3-wire	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	ZU343303 10 170 lbs. \$6.40	ZU444303 10 170 lbs. \$6.50	ZU151303 5 95 lbs. \$6.55	ZU252303 5 95 lbs. \$6.60				
Style of Cut-out	Size in inches	1 1/2 11/2 in. main 1 in. branches	2 2 in. main	3/4 3/4 2 2 in. main 3/4 in. branches	2 2 in. main				
3 to 3-wire	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each		ZU161303 5 105 lbs. \$6.80	ZU262303 5 100 lbs. \$6.90	ZU363303 5 105 lbs. \$7.00				

<sup>\*</sup>These Condulets can be furnished with covers hinged on side opposite switches, and then have the letter E inserted after U in catalogue number, as ZUE111303.

## 30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs

For finishes, see note on page 91.

Black enameled and galvanized Condulets of the same type and size may be assorted to make up a standard package. No other assortment is allowed.

Condulet reducers are listed on page 171.

Condulets of the Z series are listed on pages 136 to 143, inclusive.



We will furnish switches for Condulets listed above, and the adjustable bars, furnished with each Condulet, permit the proper mounting of any snap or pull switch enumerated on page 62 or 63.

Adapting rings, furnished with the Condulets, are required in mounting 5 or 10 ampere switches. No adapting ring is required in mounting a 20 ampere switch.

We will furnish cut-outs for Condulets listed above, and the universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs:

<sup>3</sup> to 3-Wire: BRYANT—(Cartridge) 1928, (Plug) 62135. D. & W.—(Cartridge) 91100. G. B. CO.—(Cartridge) 34374, (Plug) 62135. NOARK—(Cartridge) 3353. PAISTE—(Cartridge) 72135, (Plug) 2135. SHAWMUT— (Cartridge) 20835. TRUMBULL—(Cartridge) 21353, (Plug) 2135. WEBER—(Plug) 62135. UNION— (Cartridge) 2029.

#### CONDULETS—Z SERIES—Continued TYPE ZD

For Cartridge or Plug Fuse Cut-outs and Snap or Pull Switches Furnished with Universal Cut-out Fastening Plate, Adjustable Bars and Adapting Rings for Switches and all necessary Bolts and Screws

#### TYPE ZD CONDULETS-DEAD END-Black Enamel Finish

For 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuse N. E. C. Double Branch Cutouts and 5, 10 or 20 Ampere Switches—Cut-outs and Switches not Furnished

			Style of Cut-out	Size	in inches	1/2 ½ in. main	$\frac{1}{2}$ $\frac{1}{2}$ $\frac{3}{4}$ $\frac{3}{4}$ in. main $\frac{1}{2}$ in. branches
1)1	*	13	2 to 2-wire or 3 to 2-wire	Star Wei	alogue No dard Pkg ght Std. Pkg. Price, each.	ZD111302 15 215 lbs. \$4.85	ZD121302 15 215 lbs. \$4.95
T	Mary Street St.		Style of Cut-out	Size	in inches	3/4 3/4 3/4 3/4 in. main 3/4 in. branches	1/2 1 1/2 1 in. main 1/2 in. branches
			2 to 2-wire or 3 to 2-wire	Star Wei	alogue No dard Pkg ght Std. Pkg. Price, each.	ZD222302 15 220 lbs.	ZD131302 10 150 lbs. \$5.15
Style of Cut-out	Size in inches	i 1 in. main	$1\frac{1}{2}$ $1\frac{1}{4}$ $1\frac{1}{4}$ in. m	ain	11/4 11/4 in. main	$1\frac{1}{2}\frac{1}{1}\frac{1}{2}$ $1\frac{1}{2}$ in. main $\frac{1}{2}$ in. branches	$ \begin{array}{c c} 3/4 & & & & & & & & \\ & & & & & & & & \\ 1^{1}/2 & & & & & & \\ 1^{\frac{1}{2}} \text{in. main} & & & & \\ \frac{3}{4} \text{in. branches} & & & & & \\ \end{array} $
2 to 2-wire or 3 to 2-wire	Catalogue No Standard Pkg Weight Std. Pkg List Price, each	ZD232302 10 150 lbs.	ZD1413 10 155 lbs. \$5.25	02	ZD242302 10 160 lbs. \$5.30	ZD151302 5 90 lbs. \$5,40	ZD252302 5 95 lbs. \$5.50
Style of Cut-out	Size in inches	3/4 3/4 in. main	3/4 3/4 3/4 in. ms 3/4 in. bran		i 1 in. main	$\frac{3}{4}$ $\frac{3}{4}$ $\frac{3}{4}$ 1 in main $\frac{3}{4}$ in branches	$\frac{1}{2}$ $\frac{1}{4}$ $\frac{1}{4}$ in. main $\frac{1}{2}$ in. branches
3 to 3-wire	Catalogue No Standard Pkg Weight Std. Pkg List Price, each	ZD121303 15 235 lbs.	ZD2223 15 235 lbs. \$5.95		ZD131303 10 180 lbs. \$6.05	ZD232303 10 180 lbs. \$6.15	ZD141303 10 185 lbs. \$6.25
Style of Cut-out	Size in inches	$\frac{3}{4}$ $\frac{3}{1}$ $\frac{4}{4}$ $\frac{1}{4}$ in. main $\frac{3}{4}$ in. branches	$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ in. m		1½ 1½ in. main	3/4 3/4 2 2 in. main 4 in. branches	$ \begin{array}{c c} 1\frac{1}{4} & 1\frac{1}{4} \\ 2 & 1 \\ 2 & 1 \\ 1\frac{1}{4} & 1 \\ 2 & 1 \\ 1\frac{1}{4} & 1 \\ 2 & 1 \\ 2 & 1 \\ 2 & 1 \\ 3 & 1 \\ 3 & 1 \\ 4 & 1 \\ 3 & 1 \\ 4 & 1 \\ 3 & 1 \\ 4 & 1 \\ 3 & 1 \\ 4 & 1 \\ 3 & 1 \\ 4 & 1 \\ $
3 to 3-wire	Catalogue No Standard Pkg Weight Std. Pkg. List Price, each	ZD242303 10 185 lbs.	ZD1513 5 100 lbs. \$6.40		ZD252303 5 100 lbs. \$6.50	ZD262303 5 110 lbs. \$6.60	ZD464303 5 115 lbs. \$6.80

We will furnish cut-outs for Condulets listed above, and the universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs:

30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs

30 Ampere, 350 Volt, Cartridge and 30 Ampere, 125 Volt, Flug ruse Outs-Outs
2 to 2-Wire: BRYANT—(Cartridge) 1922, (Plug) 62587. D. & W.—(Cartridge) 91106. G. B. CO.—(Cartridge)
34369, (Plug) 62587. NOARK—(Cartridge) 3349. PAISTE—(Cartridge) 72587, (Plug) 2587. SHAWMUT
—(Cartridge) 2025. TRUMBULL—(Cartridge) 25873, (Plug) 2587. WEBER—(Plug) 62587. UNION—
(Cartridge) 2025.
3 to 2-Wire: BRYANT—(Cartridge) 1923, (Plug) 62199. D. & W.—(Cartridge) 91121. G. B. CO.—(Cartridge)
34370, (Plug) 62199. NOARK—(Cartridge) 3351. PAISTE—(Cartridge) 72199, (Plug) 2199. SHAWMUT
—(Cartridge) 2087. TRUMBULL—(Cartridge) 21993, (Plug) 2199. WEBER—(Plug) 62199. UNION—
(Cartridge) 2027.

34370, (Plug) 62199. NOARK.—(Cartridge) 3351. PAISTE—(Cartridge) 72199. (Plug) 62199. UNION—
(Cartridge) 2087. TRUMBULL—(Cartridge) 21993, (Plug) 2199. WEBER—(Plug) 62199. UNION—
(Cartridge) 2027.
3 to 3-Wire: BRYANT—(Cartridge) 1928, (Plug) 62135. D. & W.—(Cartridge) 91100. G. E. CO.—(Cartridge) 34374, (Plug) 62135. NOARK—(Cartridge) 3353. PAISTE—(Cartridge) 72135, (Plug) 2135. SHAWMUT—(Cartridge) 20835. TRUMBULL—(Cartridge) 21353, (Plug) 2135. WEBER—(Plug) 62135. UNION—
(Cartridge) 2029.

For finishes and assortments, see note on page 91. Condulet reducers are listed on page 171. Condulets of the Z series are listed on pages 136 to 143, inclusive gitized by

#### CONDULETS-Z SERIES-Continued

#### TYPE ZX

For Cartridge or Plug Fuse Cut-outs and Snap or Pull Switches

Furnished with Universal Cut-out Fastening Plate, Adjustable Bars and Adapting Rings for Switches and all necessary Bolts and Screws

#### TYPE ZX CONDULETS-THROUGH FEED-Black Enamel Finish

For 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuse N. E. C. Double Branch Cut-outs and 5, 10 or 20 Ampere Switches—Cut-outs and Switches not Furnished

			Style of Cut-out	Size	in inches	$\frac{1/2}{1/2}$ $\frac{1}{2}$ $\frac{1}{2}$ in. mains $\frac{1}{2}$ in.branches	1/2 1/2 1/2 3/4 3/4 in. mains 1/2 in. branches
	•	Tion.	2 to 2-wire or 3 to 2-wire	Star Wt.	alogue No ndard Pkg Std. Pkg Price, each.	ZX1111302 15 225 lbs. \$5.10	ZX2112302 15 230 lbs. \$5.20
	Section 1		Style of Cut-out	Size	in inches	3/4 $3/4$ $3/4$ $3/4$ $3/4$ $3/4$ $3/4$ $3/4$ in. mains $3/4$ in. branches	$\frac{1}{\frac{1}{2} - \frac{1}{2}}$ 1 in. mains $\frac{1}{2}$ in. branches
			2 to 2-wire or 3 to 2-wire	Star Wt.	alogue No dard Pkg Std. Pkg Price, each.		ZX3113302 10 160 lbs. \$5.40
Style of Cut-out	Size in inches	3/4 1 3/4 1 in. mains 3/4 in.branches	1½ in. m	-1/2	$3/4$ $3/4$ $3/4$ $3/4$ $11/4$ $1\frac{1}{4}$ in. mains $\frac{3}{4}$ in.branches	$\frac{1\sqrt{2}}{1/2}$ $\frac{1}{1/2}$ $\frac{1}{2}$ $\frac{1}{2}$ in. mains $\frac{1}{2}$ in.branches	$ \begin{array}{c c} 1\frac{1}{2} \\ 3\frac{1}{4} & 3\frac{1}{4} \\ 1\frac{1}{2} & \text{in. mains} \\ \frac{3}{4} & \text{in. branches} \end{array} $
2 to 2-wire or 3 to 2-wire	Catalogue No Standard Package Weight Std. Pkg List Price, each	ZX3223302 10 160 lbs. \$5.45	ZX4114 10 165 lbs. \$5.55	1302	ZX4224302 10 165 lbs. \$5.60	ZX5115302 5 100 lbs. \$5.75	ZX5225302 5 100 lbs. \$5.85
Style of Cut-out	Size in inches	$\frac{3/4}{1/2}$ $\frac{3/4}{3/4}$ $\frac{3}{4}$ in. mains $\frac{1}{2}$ in.branches	3/4 3/4 3/4 in. m	ains	$ \begin{array}{c c} 1\\ 1/2 & 1\\ 1 & 1 \end{array} $ 1 in. mains $\frac{1}{2}$ in.branches	1 3/4 1 3/4 1 in. mains 2/4 in. branches	$\frac{1^{1}/4}{1/2}$ $\frac{1^{1}/4}{1^{1}/4}$ $1^{1}/4$ in. mains $\frac{1}{2}$ in.branches
3 to 3-wire	Catalogue No Standard Package Weight Std. Pkg List Price, each		ZX2222 15 235 lbs. \$6.20	2303	ZX3113303 10 180 lbs. \$6.30	ZX3223303 10 180 lbs. \$6.35	ZX4114303 10 190 lbs. \$6.45
Style of Cut-out	Size in inches	3/4 3/4 11/4 1\frac{1}{4} in. mains \frac{3}{4} in.branches	$1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$ in. ms $\frac{1}{2}$ in.bran	—1/ <sub>2</sub> 2 2 2	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	3/4 - 3/4 2 in. mains 3/4 in. branches	11/4 1-11/4 2 in. mains 11/4" branches
3 to 3-wire	Catalogue No Standard Package Weight Std. Pkg List Price, each	ZX4224303	ZX5118 5 105 lbs \$6.65	5303	ZX5225303 5 105 lbs. \$6.75	ZX6226303 5 120 lbs. \$6.85	ZX6446303 5 120 lbs. \$7.00

We will furnish switches for Condulets listed above, and the aijustable bars, furnished with each Condulet, permit the mounting of any snap or pull switch enumerated on page 62 or 63.

Adapting rings, furnished with the Condulets, are required in mounting 5 or 10 ampere switches. No adapting ring is required in mounting a 20 ampere switch.

We will furnish cut-outs for Condulets listed above, and the universal cut-out fastening plates, furnished with the Condulets, take cut-outs enumerated on opposite page.

For finishes and assortments, see note on page 91.

Condulet reducers are listed on page 171.

Condulets of the Z series are listed on pages 136 to 143, inclusive.

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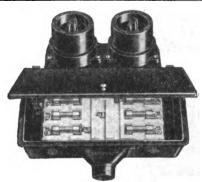
#### CONDULETS-ZG SERIES

#### TYPES ZGC AND ZGU

For Cartridge or Plug Fuse Cut-outs and General Electric 2 H. P., 250-Volt, Three-phase, Snap Switch 151394 with Protective Cover for Textile Mill Installations Furnished with Universal Cut-out Fastening Plate and all necessary Bolts and Screws



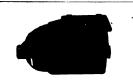
Type ZGC Condulet Showing Snap Switch and Cartridge Fuse Cut-out Installed



Type ZGU Condulet Showing Snap Switches and Cartridge Puse Cut-out Installed

#### TYPE ZGC CONDULETS--THROUGH FEED-Black Enamel Finish

For 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuse N. E. C. Main Line Cut-outs and G. E. Switch 151394—Cut-out and Switch not Furnished



Style of Cut-out	Size in inches	1/21/2	3/43/4	11
3-wire	Cat. No Std. Pkg Wt. Std. Pkg. List Price, ea.	15 155 lbs.	ZGC22303 15 160 lbs. \$3.70	ZGC33303 10 110 lbs. \$3.80

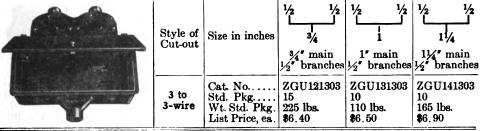
We will furnish cut-outs for Type ZGC Condulets.

The universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs: 30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs

3-Wire: BRYANT—(Cartridge) 1924, (Plug) 62165. D. & W.—(Cartridge) 91103. G. B. CO.—(Cartridge) 34372, (Plug) 62165. NOARK—(Cartridge) 3328. PAISTE—(Cartridge) 72165, (Plug) 2165. SHAWMUT—(Cartridge) 2079, TRUMBULL—(Cartridge) 21653, (Plug) 2165. WEBER—(Plug) 62165. UNION—(Cartridge) 2012.

#### TYPE ZGU CONDULETS—Black Enamel Finish

For 30 Ampere, 250 Volt, Cartridge or 30 Ampere, 125 Volt, Plug Fuse N. E. C. Double Branch Cut-outs and G. E. Switch 151394—Cut-out and Switches not Furnished



We will furnish cut-outs for Type ZGU Condulets.

The universal cut-out fastening plates, furnished with the Condulets, take the following cut-outs: 30 Ampere, 250 Volt, Cartridge and 30 Ampere, 125 Volt, Plug Fuse Cut-outs

3-Wire: BRYANT—(Cartridge) 1928, (Plug) 62135. D. & W.—(Cartridge) 91100. G. E. CO.—(Cartridge) 34374, (Plug) 62135. NOARK—(Cartridge) 3353. PAISTE—(Cartridge) 72135, (Plug) 2135. SHAWMUT—(Cartridge) 20835. TRUMBULL—(Cartridge) 21353, (Plug) 2135. WEBER—(Plug) 62135. UNION—(Cartridge) 21354. tridge) 2029.

We will furnish snap switch for Condulets listed on this page.
(Cross Reference Page 135d)

#### CONDULET BODIES TYPES UGC AND UGX

Inside Dimensions: 67/8 x 67/8 x 3 Inches



Type UGC Condulet Body with Blank Cover CX00 Attached

Types UGC and UGX Condulets, being extra heavy, are particularly suited for use in railroad yards, manholes, subways, around coast defense fortifications and wherever a rugged water-tight Condulet is desired.

They can be used in combination with the yard charging Condulets, illustrated and listed on pages 163 and 164 of Condulet Catalog No. 1000, either for surface or underground conduit installations.

The cover is firmly held in place by brass cap screws, and a heavy gasket of high grade rubber securely seals the opening. The use of brass cap screws and a high grade rubber gasket makes it easy to take off and replace the cover.

A STATE OF	1	1	

#### TYPE UGC CONDULET BODIES-For Two Conduits Size in inches..... 11/4 11/2 UGC33 Catalogue Number... UGC44 UGC55 UGC66 Standard Package... Weight Std. Pkg..... 120 lbs.

115 lbs.

\$6.40

\$6.00



#### TYPE UGX CONDULET BODIES-For Four Conduits

110 lbs.

Size in inches	1	11/4	11/2	2
Catalogue Number Standard Package Weight Std. Pkg List Price, each	5 115 lbs.	UGX4444 5 120 lbs. \$6.20	5	UGX6666 5 130 lbs. \$7.00

BLANK CAST COVER

EXTENSION COVER-for Two-Inch Conduit Stem

#### FOR TYPES UGC AND UGX CONDULET BODIES

List Price, each..... \$5.60



Furnished with Gasket and Fastening Screws .Catalogue Number. CX6 CX00. Standard Package.. 5 .Ship. Wt. Std. Pkg. 45 lbs. 50 lbs. \$3.25 ...List Price, each...



125 lbs.

\$6.80

DOUBLE RECEPTACLE HOUSING
For use with Types UGC and UGX Condulet Bodies
Complete with Two 100 Ampere Rectangular
Receptacles BR100, Spring Doors, Gasket
and Fastening Screws. See note below.\*

### EXTENSION PLATE

For Two-Inch Conduit Stem For Receptacle Housing CHXS100



CHXS100 140 lbs. \$29.00

CXH6 .....Cat. No..... ....Std. Pkg..... Ship. Wt. Std. Pkg. 65 lbs. ..List Price, each..



\*Receptacle housing listed above is regularly furnished with two rectangular receptacles BR100, requiring the use of rectangular plugs BPF100 or BPB100, but if specifically ordered, two round receptacles BRA100, requiring the use of round plugs BPFA100 or M. C. B. standard plugs, will be furnished, at an advance of \$5.50 in the list price. Spring doors are regularly furnished on receptacle housings, but if specifically ordered, removable doors will be furnished at the same price.

Finishes: Black enamel is the standard finish for Condulet bodies, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior of Condulct bodies will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. Black enameled and galvanized Condulet bodies of the same type and size may be assorted to make up a standard package.

#### TYPE YO CONDULETS

For 2 or 3-Pole Plug Receptacles and 2 or 3-Wire Cartridge or Plug Fuse Cut-outs Furnished Complete with Crouse-Hinds Plug Receptacle and Crouse-Hinds Cut-out, but without Plug or Fuses



Type YQ
(Broken-away View)
Showing Cut-out FES3B and Receptacle RYQ303 Mounted, also
Flug RQ303 and Padlock
Plug and Padlock are not included in List Prices for Condulets

These Condulets provide a housing for a combination of plug receptacle and cut-out.

They are particularly suited for use in shops having portable tools, also in garages, laundries, railroad yards, etc. They are weather-proof and, therefore, can be installed either indoors or outdoors.

Two types of N. E. C. cut-outs are furnished—cartridge and plug. The cartridge type can be used on circuits up to 30 amperes, 250 volts, and the plug type on circuits up to 30 amperes, 125 volts.

Showing Cut-out PESSE and Recognizate KYQ303 Mounted, also Plug RQ303 and Padlock
Plug RQ303 and Padlock
Plug and Padlock are not included in List Prices for Condulets
The door over the cut-out is provided with a spring catch and can be locked with a padlock if desired. The door covering the plug opening is rabbetted and is kept closed by a plunger spring, when the plug is not in place, thus preventing the entrance of dust. moisture and insects.

#### TYPE YO CONDULETS—Black Enamel Finish

Complete with		Crouse-Hinds Plug Receptacle and 30 Amp., 250 Volt N.E.C. Cartridge Fuse Cut-out, but without Fuses			Crouse-Hinds Plug Receptacle and 30 Amp., 125 Volt N. E. C. Plug Fuse Cut-out, but without Fuses		
Style of Cut-out		1/2	3/4	1	1/2	3/4	1 ,
2-wire	Catalogue No Std. Pkg Wt. Std. Pkg List Price, each.	10 260 lbs.	YQ2302E 10 265 lbs. \$16.00	YQ3302E 10 270 lbs. \$16.15	YQ1302P 10 275 lbs. \$15.85	YQ2302P 10 280 lbs. \$16.00	YQ3302P 10 290 lbs. \$16.15
3-wire	Catalogue No Std. Pkg Wt. Std. Pkg List Price, each .	10 300 lbs.	YQ2303E 10 305 lbs. \$19.00	YQ3303E 10 310 lbs. \$19.25	YQ1303P 10 315 lbs. \$18.75	YQ2303P 10 320 lbs. \$19.00	YQ3303P 10 325 lbs. \$19.25



For 30 Ca:	Ampere, rtridge F	250 Volt uses	For 30 A	mpere, 1 lug Fuses	25 Volt
2-wire	3-wire	.Style of	Cut-out.	2-wire	3-wire
PE52E	PE53E		gue No		PE53P
10 25 lbs.	30 lbs.		Package Std. Pkg.	10 30 lbs.	10 35 lbs.
\$2.85	\$3.85		ce, each.	\$2.85	\$3.85

N E C CUT OUTS FOR TYPE VO CONDILIETS





TYPE RYQ PI	UG RECEPTACLES—	30 Amp. Capacit					
For Type YQ Condulets							
2-pole	250 Volts	3-pole					
RYQ302 10 20 lbs. \$2.50	Catalogue No Standard Package Weight Std. Pkg. .List Price, each.	RYQ303 10 25 lbs. \$3.50					





TYPE I	RQ PLUGS-	-30 Amper	e Capacity
For Typ	es RQH, RQK	and RYQ Re	ceptacles
2-	Pole	3-I	ole
RQ302 25 60 lbs.	Catalogue Standard Weight S	Package.	RQ303 25 70 lbs.



We will furnish fuses.

#### SHADE HOLDERS, CONDULET ELBOWS AND CONDULET COUPLINGS

SHADE HOLDERS—Brass, Dipped Finish—For Crouse-Hinds Porcelain Receptacles



Size	For 2½-inch Shades	For 3¼-inch Shades	For 2¼-inch Shades H Position
Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	200 40 lbs.	NRS3½ 200 60 lbs. \$ .30	NRH21/4 200 50 lbs. \$ .30



CONDULET ELI	30WS-4	5 Degrees	-Black En	amel Finis	h
Size in inches	1/2	3/4	1	11/4	11/2
Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	200 100 lbs.	EL2 100 80 lbs. \$ .30	EL3 50 70 lbs.	EL4 20 55 lbs. \$ .65	EL5 10 65 lbs. \$ .70
Size in inches	2	21/2	3	31/2	4
Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	5 35 lbs.	EL7 5 70 lbs. \$2.60	EL8 5 80 lbs. \$3.00	EL9 5 110 lbs. \$4.25	EL10 5 125 lbs. \$5.30

### COUPLINGS FOR TYPE F CONDULETS—Black Enamel Finish

Size in inches	1/2	3/4	1	11/4	11/2
Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	100 30 lbs.	Coup 2 100 35 lbs. \$ .30	Coup 3 50 35 lbs. \$ .35	Coup 4 20 20 lbs. • \$ .50	Coup 5 10 15 lbs. \$ .60
Size in inches	2	21/2	3	31/2	4
Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	5 15 lbs.	Coup 7 5 25 lbs. \$1.50	Coup 8 5 30 lbs. \$2.50	Coup 9 5 50 lbs. \$4.80	Coup 10 5 55 lbs. \$5.50



CONDULET COUPLINGS—Black Enamel Finish—With Gasket							
Size in inches	1/2-1/2	3/4-3/4	1-1	11/4-11/4	11/2-11/2	2-2	
Cat. No Std. Pkg Wt. Std. Pkg List Price, each.	50 50 lbs.	Coup 22 50 60 lbs. \$ .75	Coup 33 25 30 lbs. \$ .85	Coup 44 25 35 lbs. \$ .95	Coup 55 10 25 lbs. \$1.05	Coup 66 10 30 lbs. \$1.25	

Finishes: Black enamel is the standard finish for Condulet elbows and Condulet couplings listed above, and will be furnished unless another finish is specified on the order. Galvanized finish on exterior and black enamel finish on interior will be furnished, at same price as all black enamel finish, when the order specifies galvanized finish. For special plated finishes, see page 182. For cast brass and cast bronze elbows and couplings, plain and with special finishes, see page 182. For aluminum elbows and couplings, plain and with black enamel finish, see page 182. Above Condulet elbows or couplings of the same size with black enamel or galvanized finish may be assorted to make up a standard package. No other assortment is allowed.

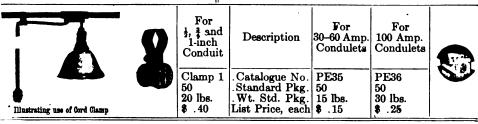
Dipped brass is the standard finish for shade holders, but polished or brush brass finish will be furnished at same price, if specifically ordered. No assortment of shade holders is allowed in making up a standard package.

#### CONDULET REDUCERS, CONDULET UNIONS AND CORD CLAMP

CONDULET REDUCERS							
Standard Pkg. Assorted* 50 50	50	50	25	25	25	10	10
Ship. Wt. Std. Pkg 60 lbs. 65 lb	os. 70 lbs.	75 lbs.	45 lbs.	65 lbs.	105 lbs.	80 lbs.	100 lbs
Size in inches			2-1/2	21/2-1/2	3-1/2	31/2-1/2	4-1/2
Catalogue Number RE21 RE3		RE51	RE61		RE81		REIOI
	0 - \$ .30				<b>\$</b> 1.35		<b>\$2.75</b>
Size in inches 1-3	34 11/4-3/4	11/2-3/4	2-3/4	21/2-3/4	3-3/4	31/2-3/4	4-3/4
Catalogue Number RE3		RE52	RE62	RE72	RE82	RE92	RE102
List Price, each 3 .2	0 8 .30	\$ .40	\$ .50	\$1.00	\$1.35	\$2.00	<b>\$2.75</b>
Size in inches	/*	11/2-1	2-1	21/2-1	3-1	31/2-1	4-1
Catalogue Number	r RE43	RE53	RE63	RE73	RE83	RE93	RE103
List Price, each	\$ .30	\$ .40	\$ .50	\$1.00	\$1.35	\$2.00	\$2.75
Size in incl	hes	11/2-11/4	2-11/4	21/2-11/4	3-11/4	31/2-11/4	4-11/4
Catalogue	Number	RE54	RE64		RE84		RE104
List Price,	each	<b>8</b> .40	<b>\$</b> .50	<b>\$</b> 1.00	<b>\$</b> 1.35	\$2.00	<b>\$2.75</b>
	e in inches		2-11/2	21/2-11/2	3-11/2	31/2-11/2	4-11/2
Condulet Reducer Ca	talogue Nu	ımber	RE65	RE75	RE85	RE95	<b>RE105</b>
Lis	st Price, eac	ch	<b>\$</b> .50	<b>\$</b> 1.00	<b>\$</b> 1.35	\$2.00	<b>\$2.75</b>
	Size ii	n inches		21/2-2	3-2	31/2-2	4-2
	Catal	ogue Nu	ımber	RE76	RE86	RE96	RE106
CONDULET UNIONS	List F	Price, eac	:h	\$1.00	<b>\$</b> 1.35	<b>\$2.00</b>	<b>\$2.75</b>
		Size ir	inches.	• • • • • • • • •	3-21/2	31/2-21/2	4-21/2
		Catalo	ogue Nu	mber	RE87	RE97	RE107
		List P	rice, eac	h	<b>\$</b> 1.35	<b>\$2.00</b>	<b>\$2.75</b>
	·		Size ir	inches.		31/2-3	4-3
Condulet Union (Exploded View) Condulet Union			Catalo	gue Nu	mber	RE98	RE108
Size in inches. 1/2-1/2   3/4-3/4   1-1	11/4-11/4 1	1/2-11/2	List P	rice, eac	h	<b>\$2.00</b>	<b>\$2.75</b>
Catalogue No. UN11 UN22 UN33 Standard Pkg. 50 50 25	UN44 U	UN55   25		Size in	inches		4-31/2
Wt. Std. Pkg. 40 lbs. 50 lbs. 40 lbs		30 lbs.		Catalo	gue Nu	mber	RE109
List Price, ea. \$ .35   \$ .40   \$ .60	\$1.00	1.25		List P	rice, eac	h	<b>₹2.75</b>

CORD CLAMP—Black Enamel Finish

PORCELAIN BUSHING-For Type FF Condulets



\*Reducers listed in the same vertical column may be assorted to make up a standard package.

Finishes: Reducers are furnished with galvanized finish only.

Black enamel is the standard finish for unions, and will be furnished unless another finish is specified on the order. Galvanized finish will be furnished, if specifically ordered, at the same price as black enamel finish. For special plated finishes, see page 182. For cast brass and cast bronze reducers and unions, see page 182.

Black enameled and galvanized unions of the same size may be assorted to make up a standard package.

#### GUARDS, GLOBES, SEALING PLATES AND REFLECTOR HOLDERS

#### **GUARDS**



Size		eries and ent VGDE1	For VH Series and Equipment VGDE2		
Finish	Black	Marine	Black	Marine	
Cat. No		V90	VH9	VH90	
Std. Pkg	35	35	35	35	
Wt. Std. Pkg.	40 lbs.	40 lbs.	60 lbs.	60 lbs.	
List Price, ea.	\$1.80	\$1.80	\$2.25	\$2.25	

#### GLOBES

Color	Clear	Opal	Green	Blue	Orange	Ruby
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#### For V Series of Condulets and Equipment VGDE1



Cat. No Std. Pkg.		V41	V42	V43		V45
Wt. Pkg.	50 lbs.	35 50 lbs.	50 lbs.	50 lbs.	35 50 lbs.	35 50 lbs.
List, ea	\$ .80	\$1.10	\$1.70	\$1.70	\$1.70	\$2.35

#### For VH Series of Condulets and Equipment VGDE2

Cat.No	VH8	VH41	VH42	VH43	VH44	VH45
Std. Pkg.	35	35	35	35	35	35
Wt. Pkg.	60 lbs.	60 lbs	60 lbs	60 lbs	60 lbs	60 lbs
List, ea.	\$ .80	\$1.70	\$2.35	\$2.35	60 lbs. \$2.35	

#### SEALING PLATES—Brass



For V and VH Series of Condulets							
Size	For V Series	For VH Series					
Catalogue Number Std. Pkg., not Ass'd.	V51	VH51 35					
Ship. Wt. Std. Pkg	30 lbs.	40 lbs.					
List Price, each	\$ .30	\$ .50					

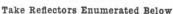
#### REFLECTOR HOLDERS

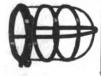
#### Take Reflectors Enumerated Below



Size		eries and ent VGDE1	For VH Series and Equipment VGDE2		
Finish	Black	Marine	Black	Marine	
Cat. No		V610	VH61	VH610	
Std. Pkg		35	35	35	
Wt. Std. Pkg.		30 lbs.	35 lbs.	35 lbs.	
List Price, ea.	\$1.40	\$1.40	\$1.65	\$1.65	

#### COMBINATION REFLECTOR HOLDERS WITH GUARDS





Size	For V S Equipme	eries and ent VGDE1	For VH Series and Equipment VGDE2		
Finish	Black	Marine	Black	Marine	
Cat. No		V710	VH71	VH710	
Std. Pkg	35	35	35	35	
Wt. Std. Pkg.		50 lbs.	70 lbs.	70 lbs.	
List Price, ea.	\$2.00	\$2.00	\$2.50	\$2.50	

We will furnish reflectors for above holders, and they take the following reflectors: Holders V61, V610, V71 and V710 take HOLOPHANE—626, 627 and OVERBAUGH & AYERS—769, 771. Holders VH61, VH610, VH71 and VH710 take HOLOPHANE—628, 629 and OVERBAUGH & AYERS—770, 772.

Finishes: Galvanized finish will be furnished at the same price as black finish, when order specifies galvanized finish.

Black, marine and galvanized guards of the same size may be assorted to make up a standard package. The same assortment applies to reflector holders and reflector holders with guards. Condulets of the V series are listed on pages 98 to 101, inclusive. Condulets of the VH series are listed on pages 102 to 105, inclusive.



Type V Condulet Complete with Globe, Guard Receptacle and Sealing Plate (Broken-away View)



Showing Reflector Mounted List prices do not include and we do not furnish Reflectors



Reflector Holder with Guard Showing Reflector Mounted List prices do not include and we do not furnish Reflectors

#### GASKETS

#### GASKETS FOR OBROUND COVERS AND OBROUND CONDULETTO FITTINGS

#### For use between Condulet Bodies and Covers or Fittings

	Size in inches .  Catalogue Nur Standard Pack List Price, eac	nber	Gask 1 200	3/4 Gask 2 100 \$ .10	Gask 3 50 \$ .15	11/4 Gask 4 25 \$ .20	1½ Gask 5 25 \$ .20
Size in inches		2	21/2	3	31/2	4	5 and 6
Catalogue Number		25	Gask 7 25 \$ .40	Gask 8 25 \$ .40	Gask 9 25 \$ .50	Gask 10 25 \$ .60	Gask 86 25 \$ .70

### GASKETS FOR OBROUND CONDULETTO FITTINGS For use between Cap and Base

GASKET FOR FD AND FS CONDULET BODIES

-

Size in inches	1/2	3/4	1	
Cat. No	Gask 31	Gask 32	Gask 33	Gask 91
Std. Pkg		100	50	30
List Price, ea		\$ .10	\$ .15	\$ .25



#### GASKETS FOR TYPE F CONDULET COUPLINGS

	Size in inches			1/2	3/4	1	11/4
0	Catalogue Nur Standard Pack List Price, eac	age		100	Gask 12 100 \$ .05	Gask 13 50 \$ .08	Gask 14 25 \$ .10
Size in inches		11/2	2	21/2	3	31/2	4
Catalogue Number		25	Gask 16 25 \$ .15	Gask 17 25 \$ .20	Gask 18 25 \$ .20	Gask 19 25 \$ .40	Gask 20 25 \$ .50

#### GASKETS FOR G AND H SERIES OF CONDULET BODIES

GASKETS FOR NORBITT CONDULETTO FITTINGS

For use between Bodies and Covers or Fittings

For use between Bodies of the J and K Series and Fittings

	For Form 5 and Form 10 Bodies	For Form 20 Bodies	Gask 23 is also for use with Blank Cover J100
0	Gask 21	Gask 22	Catalogue Number   Gask 23
	100	75	Standard Package   200
	\$ .10	\$ .15	List Price, each   \$ .10



### GASKETS FOR RJ AND RK SERIES OF CONDULET BODIES

GASKETS FOR ELLIPTICAL CONDULETTO FITTINGS

For use between Bodies and Metal Covers

For use between RJ and RK Series of Condulet Bodies and Fittings or Porcelain Covers

Gask 35   Catalogue Number   Gask 200   Standard Package   200   \$ .15   List Price, each   \$ .	



#### GASKETS FOR V SERIES OF CONDULETS GASKETS FOR VH SERIES OF CONDULETS

0	Sealing Plate Gasket	Globe Gasket	Description	Sealing Plate Gasket	Globe Gasket	0
0	Gask 26 35 \$ .15	Gask 24 35 \$ .15	Cat. No Std. Pkg List, each	35	Gask 25 35 \$ .20	

Listings of gaskets continued on opposite page.



#### GASKETS—Continued

Gaske	ets for W	V Condul	ets		Gas	kets for	Equ	ipment	s VGDE1 a	nd VGDE2
	Globe C Upper	Gaskets Lower	Cover Gasket		scrip-	Globe For VGDE	1	For GDE 2	Between Holder and	
	Gask 87 25	Gask 88 25	25	Cat Std.	No.	Gask 2 35	24 Ga 35	ask 25	Gask 60	Gask 60
Gask 87 Fasket for Ty	\$ .35 pes PRC	\$ .35	\$ .35 Condul		Ga				\$ .25 A and PJX	
For use be	tween Bo	dies and	Covers			For u	se bet	tween 1	Bodies and (	overs
	Gask 25 \$ .35		Cata Sta Lis	ndard	Pack	age		Gask 6 25 \$ .30	57	l heddinet halfi hid
			Gaske	ts for	RS	Series o	f Cor	ndulet	Bodies	g-maket -
Gask 63	Size.		81/2	or x8½ over	81	For $2x4\frac{1}{2}$ over	41/2	or 5x4½ over	For 8½x4 Side Plate	For 4½x4 Side Plate
Gask 66	Stand	ogue No. lard Pkg. Price, eac	25		Gas 25 \$ .4	k 63	Gasl 25 \$ .3		Gask 66 25 \$ .35	Gask 65 25 \$ .30
Gaskets for C For use bet	ondulet I	Bodies ies and L			1			en Bod	es of Condu ies and Receiver	
Gask 60	Gask 35 \$ .25	35	sk 85	. Sta	ndard	e Numb Packa ice, eacl	ge .	Gask 8 50 \$ .25	4	
asket for Tyr	es JRRF	I and JR	RV Hood	ds ds	G	asket for use be	or Ty	pes M	OH and Moulet Bodies	OV Hoods and Hoods
R T Say	Gask 50 \$ .20		Cata	ndard	Pack	age	!	Gask 9 50 \$ .25		Tell
Gasket for Tr		ies and C		S	Gasl	et for 'For use	Types bety	s BPF, ween Re	BPFA and eceptacle Ho Plugs	BPB Plugs ousings
	Gask 25 \$ .75		Cata Star Lis	dard	Pack	age	2	Gask 59 25 3 .25		
Gaskets		UGE Fr	ame			Gaske	ts for	SP S	eries of Cor	dulets
	or I Plate Recep	otacle F	For operting and Flange Plates	Desc	eriptio	n for l	sket Brass ing	Gask for Gla Dis	ss s	2
Gask 83	Gask 25 \$ .40	25	sk 83 .40	Sto	t. No. l. Pkg Price, e		k 57	Gask 25 \$ .50	G	ask 57
Hoods that	take Rec	eptacle MP1	Lounting		Ga	sket fo			o Clamp Fi c CCV337	ttings and
0	Gask 35 \$ .30	85	Cata	logue	Pack	age	5	Gask 30 25 3 .10	0	0

#### OBROUND CONDULETTO FITTINGS

For Types A, B, C, CO, D, E, LB, LBA, LBB, LBL, LBV, LF, LFB, LFM, LL, LLB, LR, LRB, LU, T, TB, TL, TR, U, UB and X Condulet Bodies

Furnished with Gasket between Base and Cap, and all necessary Fastening Screws

	RECEPTACLES WITH SHA	DE HOLI	DER GRO	OVE					
	Size of Condulet Body	1/2	3/4	1					
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	200 120 lbs.	JR2G 100 80 lbs. \$ .35	JR3G 50 55 lbs. \$ .40					
	RECEPTACLES WITHOUT SH	ADE HO	LDER GF	OOVE					
	Size of Condulet Body	1/2	3/4	1					
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	120 lbs.	JR2 100 80 lbs. \$ .30	JR3 50 55 lbs. \$ .35					
	CORD ROS	ETTES							
1600	Size of Condulet Body	1/2	3/4	1					
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	200 120 lbs.	JC2 100 80 lbs. \$ .25	JC3, 50 60 lbs. \$ .301					
1	FIXTURE ROSETTES WITH 1/8 MALE NIPPLE								
	Size of Condulet Body	1/2	3/4	1					
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	100 80 lbs.	JF29 100 90 lbs. \$ .35	JF39 50 60 lbs. \$ .40					
3 2 .	FIXTURE ROSETTES WITH	1 1/8 FEM	IALE NIP	PLE					
000	Size of Condulet Body	1/2	3/4	1					
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	100 80 lbs.	JF2 100 90 lbs. \$ .35	JF3 50 60 lbs. \$ .40					
REPAIR -	HUBBELL ATTACHMENT PLUG RECEPTACLES-10 AMPER								
Carried States	Size of Condulet Body	1/2	3/4	1					
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	100 70 lbs.	JR25 100 80 lbs. \$ .45	JR35 50 55 lbs. \$ .50					
Transfer .	HUBBELL POLARITY PLUG R	U 15 (V. 5 h	LES-20	MPERE					
6-0	Size of Condulet Body	1/2	3/4	1					
Carlo Carlo Carlo									

Obround Conduletto fittings are made in sizes for ½, ¾ and 1-inch Obround Condulet bodies.

Catalogue Number . . . . . .

List Price, each . . . .

Proper fastening screws are furnished with Obround Conduletto fittings, and are so held in screw holes that they can not fall out.

We will furnish Hubbell Knife blade plug attachments.

Condulet bodies that take Obround Conduletto fittings are listed on pages 21 to 29a, inclusive. Obround gaskets are listed separately on page 176.

(Cross Reference Page 185)

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JR22

80 lbs.

100

JR32

55 lbs.

\$ .65

50

JR12

70 lbs.

\$ .55

100

#### NORBITT CONDULETTO FITTINGS

For Condulet Bodies of the J and K Series Furnished with Gasket and Fastening Screw

1	RECEPTACLE WITH SHADE HOLDER GROO	VE				
-	Complete Fitting	- No				
	Catalogue Number Standard Package Shipping Weight Std. Pkg List Price, each	200				
	RECEPTACLE WITHOUT SHADE HOLDER GR	OOVE				
	Complete Fitting	- V				
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	200 130 lbs.				
	CORD ROSETTE	- 1102				
No 1	Complete Fitting	10.7				
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	200				
	FIXTURE ROSETTE WITH 1/8 MALE NIPPLE					
	Complete Fitting					
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	CC339 100 80 lbs. \$ .35				
(III.)	FIXTURE ROSETTE WITH 1/8 FEMALE NIPP	LE				
100	Complete Fitting					
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	CC338 100 80 lbs. \$ .35				
(1)	HUBBELL ATTACHMENT PLUG RECEPTACLE-10 AMPER					
(EEE)	Complete Fitting					
	Catalogue Number Standard Package Shipping Weight Std. Pkg List Price, each	CC5 100 70 lbs. \$ .50				
627	HUBBELL POLARITY PLUG RECEPTACLE-20 A	MPERE				
(300)	Complete Fitting	4.1				
	Catalogue Number Standard Package Shipping Weight Std. Pkg. List Price, each	CC20 100 70 lbs. \$ .65				

Norbitt Conduletto fittings are made in one size only and are interchangeable on Condulet bodies of the J and K series.

Proper fastening screw is furnished with each Norbitt Conduletto fitting, and is so held in screw hole that it can not fall out.

We will furnish Hubbell knife blade plug attachments.

Condulet bodies that take Norbitt Conduletto fittings are listed on pages 65, 66 and 67. Gasket is listed separately on page 176.

(Cross Reference Page 187)



#### ELLIPTICAL CONDULETTO FITTINGS

#### For Condulet Bodies of the RJ and RK Series

Furnished with Gasket and Fastening Screws

	RECEPTACLE WITH SHADE HOLDER GROOVE
1	Complete Fitting
2	Catalogue NumberRK527GStandard Package200Shipping Weight Std. Pkg100 lbs.List Price, each\$ .45
	RECEPTACLE WITHOUT SHADE HOLDER GROOVE
	Complete Fitting
	Catalogue NumberRK527Standard Package200Shipping Weight Std. Pkg100 lbs.List Price, each\$ .40
	CORD ROSETTE
	Complete Fitting
	Catalogue Number         RK532           Standard Package         200           Shipping Weight Std. Pkg         110 lbs.           List Price, each         \$ .30
	FIXTURE ROSETTE WITH 1/8 MALE NIPPLE
	Complete Fitting
	Catalogue NumberRK539Standard Package100Shipping Weight Std. Pkg70 lbs.List Price, each\$ .35
	FIXTURE ROSETTE WITH 1/8 FEMALE NIPPLE
	Complete Fitting
100	Catalogue NumberRK538Standard Package100Shipping Weight Std. Pkg70 lbs.List Price, each\$ .35
	HUBBELL ATTACHMENT PLUG RECEPTACLE-10 AMPER
-	Complete Fitting
	Catalogue NumberRK5Standard Package100Shipping Weight Std. Pkg80 lbs.List Price, each\$ .50

	HUBBELL	POLARITY	PLUG	RECEPTACLE—20	AMPERE

List Price, each

	50	1
Mr.		0
TO S	1	-
	A	4

Complete Fitting	
Catalogue Number	RK20 100
Standard Package Shipping Weight Std. Pkg. List Price, each	80 lbs. \$ .65

Elliptical Conduletto fittings are made in one size only and are interchangeable on all Condulet bodies of the RJ and RK series.

Proper fastening screws are furnished with Elliptical Conduletto fittings, and are so held in screw holes that they can not fall out.

We will furnish Hubbell knife blade plug attachments.
Condulet bodies that take Elliptical Conduletto fittings are listed on pages 69, 70, 71 and 72. Gasket is listed separately on page 176. Digitized by GOOSIC

(Cross Reference Page 189)

#### NORBITT CONDULETTO CLAMP FITTINGS

FOR CONDULETS OF THE S SERIES

Morbitt Conduletto Clamp Receptacle C337 is used with the following: Equipments VGDE1 and VGDE2; Crouse-Hinds Reflector and Receptacle Holder SRH2, and Receptacle Mounting Plate RMP1. Furnished with Gasket



Norbitt Conduletto Clamp Receptacle With Shade Holder Groove (Exploded View)

Norbitt Conduletto Clamp fittings eliminate soldered and taped joints, and have the additional advantage of enclosed contacts.

These fittings are made in two parts—base and cap. Circuit wires connect direct to the base, and two screws through the cap complete the electrical connection and clamp fitting in position.

Norbitt Conduletto Clamp fittings have a base common to all. This construction permits the substitution of one style of cap for another, without disconnecting circuit wires.



Norbitt Conduletto Clamp Cord Rosette (Exploded View)

	1		D	ì
	-	358	9	
6	1	100	1	
1	-	122	23	1
1	-	1	浬	
- 8		100	No.	

Description	Fitting Complete
Catalogue Number Standard Package Shipping Weight Std. Pkg.	200

RECEPTACLE WITH SHADE HOLDER GROOVE



#### RECEPTACLE WITHOUT SHADE HOLDER GROOVE

4	Description	Fitting Complete
Catalogue Nu Standard Paci	mberkage	C337
Shipping Weig	ght Std. Pkg	110 lbs.



#### CORD ROSETTE

Description					
Catalogue Number Standard Package	200				
Shipping Weight Std. Pkg	\$ .30				



#### FIXTURE ROSETTE WITH 1/8 MALE NIPPLE

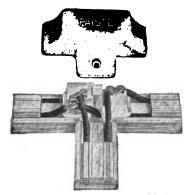
Description	Fitting Complete
Catalogue Number Standard Package	C449 100
Shipping Weight Std. Pkg. List Price, each	65 lbs.



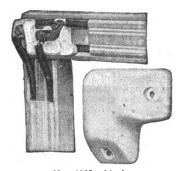
#### FIXTURE ROSETTE WITH 1/2 FEMALE NIPPLE

,,						
Description	Fitting Complete					
Catalogue_Number	C448					
Standard Package Shipping Weight Std. Pkg List Price, each	100					
Shipping Weight Std. Pkg.	65 lbs.					
List Price each	\$ .85					

#### PAISTE MOLDING TAPLET FITTINGS



Molding Taplet No. 4090—1/4 size
With Cover Off, Showing Method of Wiring



No. 4109—1/2 size With Cover Off, Showing Method of Wiring

Molding Taplets

Molding Taplets are used for making single or double branches in either 2- or 3-wire molding. The illustration is that of a single 2-wire branch on 2-wire molding, and besides the fact that it is an "approved" fitting, the economy in its use is enough to more than pay its original cost.

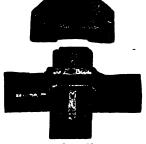
In using taplets it is not necessary to cut either the molding or the wires.

The wires in every case are carried right through, simply leaving enough slack to loop over the bottom part; the molding does not have to be cut, as the taplets set on top. The branch wires start off from set screws, and a neat cover conceals everything.

List No.		Carton Quantity	Std. Pkg.	Pkg. Wt.	Mfrs. List Each	W. E. List Each
4090	2-Wire single branch	10	250	107	\$0.30	\$0.48
4091	3-Wire single branch	5	100	105	.45	.72
4092	3-to 2-Wire single branch	5	100	98	.40	. 64
4093	3-to 2-Wire double branch	5	100	102	.60	.96
4094	2-Wire double branch	5	100	67	.45	.72

Angle Molding Taplets

4107	2-Wire Angle Taplet	4	50	40	\$0.50	\$0.80
4108	3-Wire Angle Taplet	4	50	50	.60	.96
4109	2-Wire Corner Taplet	4	50	53	.30	.48



Molding Cross Over No. 4095—1/2 size With Cover Off, Showing Running of Wires





Molding Connector No. 4099—⅓ size With Cover Off, Showing Method of Wiring

Molding Cross Overs

Cross Overs are for use where a new line of molding must be carried across another line already in

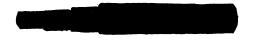
This Cross Over is very simple, consisting of a porcelain channel piece for the wire runways, with a neat porcelain cover over all.

List		Carton	Std.	Pkg.	Mfrs. List	W. E. List
No.		Quantity	Pkg.	Wt.	Each	Each
4095 4096 4097 4098	2-Wire crossing 2-wire. 3-Wire crossing 3-wire. 2-Wire crossing 3-wire. 3-Wire crossing 2-wire.	5 5	250 100 100 100	95 65 62 63	\$0.15 .20 .20 .20	\$0.24 .32 .32 .32

Molding Connectors

4099	2-Wire Connector	10	250	81 \$0.25	\$0.40
4100	3-Wire Connector	4	100 ized by	(55) (100-25) (55) (100-25)	. 56

#### WEATHERPROOF COPPER WIRES





No. 4 Solid Weatherproof

These wires have three closely woven braids of cotton, all thoroughly saturated with a black weather-proof compound, which shows no signs of softening under ordinary temperature. The outer braid is smoothly polished. Stranded wires, including larger sizes of feeder cable, are braided with standard cotton yarn. The style of stranding shown in table below is a regular product of the factory but the conductor can be specially stranded of a greater or less number of wires if desired. Concentric strands are used entirely as that gives the smallest diameter conductor for the carrying capacity.

### Triple Braid—Solid Conductor

		Approxim.		Approx.		Put Up poi	R SHIPMENT	•	
	Size			Diameter	Re	els		ontaining 200 Lbs.	Coils Approx.
List No.	B. & S. Gauge	Per 1000 Ft.	Per Mile	Insulation Inches	Approx. Length Ft.	Approx. WeightLbs.	Coils	Weight	Weight Lbs.
660000	0000	767	4050	25	2640	2025			<del> </del>
660001	000	630	3320	1 11	2640	1660		l i	
660002	00	502	2650	#	2640	1325		1	
660003	. 0	407	2150	7.	2640	1075		1	
660004	` 1	316	1670	1½	800	250		1 1	125
660005	2	260	1370	14	1000	260		1	130
660006	3	200	1050	1 27	1250	250		ļ <u></u>	125
660007	4	164	865	1 11	1600	260			130
660008	5	134	710	111	2000	270			135
660009	6	112	590	1 14	2500	280			1 <b>4</b> 0
660010	8	75	395	1 11	2700	200		1	100
660011	10	53	280	1/2	3300	170	8	25	85
660012	12	35	185	1 1 2 2			8 8 8	25	
660013	14	25	130	1 👯			8	25	
660014	16	14	75	1 33			12	17	
660015	18	11	58	######################################			12	17	

#### Triple Braid—Stranded Conductor

		APPROXIMA	TE WEIGHT	Approx.	CONCENTR	IC STRANDS	Pur	Put up for Shipment		
	Capacity	in Pe	DUNDS	Diameter				Reels		
List No.	Circular Mils	Per 1000 Ft.	Per Mile	over Insulation Inches	Number of Wires	Diameter each in Inches	Diameter Reels Inches	Approx. Length Feet	Approx. Weight Pounds	
660016	2000000	7000	37000	21/8	91	.148	48	400	2800	
660017	1750000	6200	32750	$\bar{2}$	91	.139	48	400	2500	
660018	1500000	5400	28500	1 1/8	91	.128	48	500	2700	
660019	1250000	4500	23800	13/	91	.117	48	600	2700	
660020	1000000	3675	19400	1	61	.128	45	660	2425	
660021	900000	3330	17600	1 2 2 2	61	.121	45	720	2400	
660022	800000	3000	15800	1 🔆	61	.114	45	800	2400	
660023	700000	2650	14000	11	61	.107	45	900	2385	
660024	600000	2235	11800	121	61	.099	45	1000	2235	
660025	500000	1900	10000	11/4 1 /6 1 /6	37	.116	48	1320	2560	
660026	450000	1725	9100	1 📆	37	.110	45	1320	2280	
660027	400000	1550	8200	12	37	.104	45	1320	2020	
660028	350000	1345	7100	1	27	.114	42	1500	2010	
660029	300000	1175	6200	13	27	.105	42	1500	1760	
660030	250000	985	5200	11	19	.115	42	2000	1970	
660031	0000	800	4220	1 11	19	.105	45	<b>264</b> 0	2110	
660032	000	653	3450	<b>11</b>	12	.118	42	<b>264</b> 0	1725	
660033	00	522	2760	1 11	12	.105	36	<b>264</b> 0	1380	
660034	0	424	2240	<b>#</b>	7	.123	36	2640	1120	
660035	1	328	1735	l <del>II</del>	7	.109	28	800 .	260	
660036	2	270	1425	<del>22</del>	7	098	28	1000	270	
660037	3	206	1090	11	7	.086	28	1200	250	
660038	4	170	900	16	7	.077	28	1500	255	
660039	5	140	740	<b>3</b> ∕8	7	.068	28	2000	280	
660040	6	115	610		7	.061	28	2500	285	
660041	8	78	410	377	7	.048	28	2500	105	
Prices	on applicat	ion.				Digitized	by GOC	7816		

#### WEATHERPROOF COPPER AND IRON WIRE



Triple Braided

### Weatherproof Hard-drawn Copper Wire

#### Triple Braided

These wires are insulated especially for the telephone and telegraph trade and railway signal work, combining the highest conductivity with the greatest tensile strength. Unless specially ordered otherwise, these wires are put up in coils as shown, thoroughly burlapped.

Sizes marked (x) are made up on special order only.

List No.	Size B. & S. Gauge	Capacity Circular Mils.	Triple Braided Approximate Pounds per Mile	Length of Coils
660042	x 8	16,510	395	1/2 mile
660043	x 9	13,094	325	1/2 mile
660044	10	10,382	280	1/2 mile
660045	12	6,530	185	1/2 mile
660046	14	4,107	130	1/2 mile

Double Braid will be furnished on request.



Double and Triple Braided

#### Weatherproof Iron Wire

#### Double and Triple Braided

These wires are extensively used in telephone and telegraph work, and have the same insulation as regular weatherproof line wires. They are finished with the same smooth polish as all other wires, and are put up for shipment in coils only, thoroughly wrapped in burlap.

Nos. 8, 9 and 10 Double Braided are made up on special order only.

List No.	Size Iron Wire Gauge	Double Braided Approximate Pounds per Mile	Triple Braided Approximate Pounds per Mile	Length of Coils
660047	8	470	520	1/4 mile
660048	9	400	450	1/4 mile
660049	10	350	400	1/2 mile
660050	12	230	260	1/4 mile
660051	14	150	175	1/4 mile

#### SLOW-BURNING WIRE



Solid Conductor, Triple Braided

#### Solid Conductor, Triple Braided

It has three close braids of cotton, all saturated with a white fireproof compound. It is finished with a smooth, hard finish.

	i, naid ii	Approx	rimate				PUT UP F	OR SHIP	MENT	
	Size	Wei in Po	ght	Approximate Diameter		RE	EL8	CA	SE8	Coils
List No.	B. & S. Gauge		Per	over Insulation	Diam. Reels,	Approx. Length,	Approx. Weight,		ining 200 lbs.	Approx. Weight,
		Per 1000 Ft.	Mile	Inches	Inches	Feet	Pounds	Coils	Weight Pounds	
660052	0000	925	4890	3/4	42	2640	2450			
660053	000	760	4020	45	42	2640	2000	1		
660054	00	600	3170	1 11	36	2640	1600		1	
660055	0	495	2610	1 1/2	36	2640	1300		1	
660056	0000	925	4890	3⁄4	28	325	300			
660057	000	760	4020	#	28	400	300			
660058	00	600	3170	1 <del>37</del>	28	500	300	i		
660059	0	495	2610	1 37	28	625	310	}	1 i	
660060	1	365	1930	<del>  }</del>	28	800	290			150
660061	2	320	1690	15	28	1000	320			160
660062	3	270	1425	1 12	28	1250	340	j	f i	170
660063	4	220	1160	8	28	1600	350			175
660064	5	190	1000	) <del>11</del>	28	2000	380	!		190
660065	6	160	845	19	28	2500	400	١ ۾	ا مہ ا	200
660066	8	100	·530	\$4		H		8	25	
666067	10	80	420	/4		ł	1	8	25	
660068	12	55	290	1 12		l		8 8 8 8	25	
660069	14	40	210	🐧		1	]		25	
660070	16	18	95	% \$\$\$!\$\$!?\% \$\$\$!\$\$!?\\$?\\$?\\$?\\$?\\$?\\$?\\$?\\$?\\$?\\$?\\$?\\$?\\$?			1	12	17	
660071	18	14	75	1 1/6		1	<u> </u>	12	17	



Stranded Conductor, Triple Braided

Stranded Conductor, Triple Braided

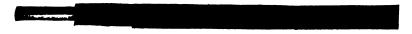
All three braids of cotton thoroughly saturated with white fireproof compound. The compound used on the outer braid becomes very hard but still the wire retains its flexibility. As this insulation does not deteriorate in a continued high temperature, it is especially suitable for engine and boiler rooms, furnaces and foundries.

7	Capacity		Approx.		entric ands	PUT UP FOR SHIPMENT REELS			
List No.	B. & S.				Number	Diameter	Diameter	Approx.	Approx.
Line -	Gauge	Per 1000 Ft.	Per Mile	Insulation Inches	of Wires	Each	Reels, Inches	Length, Feet	Weight Pounds
660072	0000	960	5070	· 53	19	.105	45	2640	2535
660073	000	785	4150	49	12	.118	42	2640	2075
660074	00	625	3300	41	12	.105	36	2640	1650
660075	0	510	2700	37	7	.123	36	2640	1350
660076	0000	960	5070 _	53	19	.105	28	375	360
660077	000	785	4150	53 64 49 64 41	12	.118	28	450	350
660078	00	625	3300	41	12	.105	28	525	375
660079	0	510	2700	37	7	.123	28	650	330
660080	1	380	2000	33	7	.109	28	800	300
660081	2	335	1770	31	7	.098	28	1000	335
660082	3	280	1480	29	7	.086	28	1200	335
660083	4	230	1220	31 64 29 64 27 64	7	.077	28	1500	340
660084	5	195	1030	3/8	7	.068	28	2000	390
660085	6	165	870	11 32	7	.061	28	2500	410
660086	8	105	555	32	7	.048	28	2500	260

The styles of strands shown are those regularly used, but strands composed of a greater or lesser number of wires can be furnished if desired. Digitized by GOOGLE

Prices on application.

# . Western Electric RUBBER-COVERED WIRES



No. 10 Solid Single Braid Wire

#### Solid Copper Conductors

These rubber-covered wires are made according to the specifications of the National Board of Fire Underwriters, and each coil is tested and stamped by the Wire Inspection Bureau before leaving the factory. The conductors are thoroughly tinned and are covered with two thicknesses of high-grade rubber compound, which is thoroughly vulcanized. The wires are braided with a standard cotton yarn, the braids being thoroughly saturated with a pure wax compound having a high melting point, and are smoothly and evenly finished. The smooth, hard finish given these wires enables them to be handled readily and makes them especially desirable for conduit work. The single braided wires can also be finished with a white-fireproof compound over the braid.

#### SINGLE BRAID

List	Size B. & S.	Diam. of Copper	Capacity Circular	Rubber Wall	Diam. Over All	Weight Lba.
No.	Gauge	Mils	Mils	Inches	Inches	per 1000 Ft.
660097 660098 660099 660100 660101 660102 660103 660104	8 10 12 14 16 18 19 20	1285 1019 0808 0640 0508 0403 0354 0319	16509 10381 6530 4107 2583 1624 1252 1021	3/64 3/64 3/64 3/64 1/32 1/32 1/32 1/32	19/64 17/64 16/64 14/64 3/16 11/64 5/32 9/64	85 60 44 34 20 16 15

#### DOUBLE BRAID

List No.	Size B. & S. Gauge	Diam. of Copper Mils	Capacity Circular Mils	Rubber Wall Inches	Diam. Over All Inches	Weight, Lbs per 1000 Ft
660105	0000	4600	211600	5/64	52/64	832
660106	000	4096	167805	5/64	48/64	· 690
660107	00	3648	133079	5 <b>/64</b>	47/64	568
660108	- 0	3249	105512	5/64	45/64	476
660109	1 1	2893	83694	5/64	39/64	376
660110	2	2576	66373	1/16	35/64	297
660111	3	2294	52634	1/16	17/32	245
660112	4	2043	41742	1/16	1/2	204
660113	5	1819	33102	1/16	15/32	174
660114	6	1620	26250	1/16	28/64	147
660115	1 8	1285	16509	3/64	3/8	95
660116	10	1019	10381	3/64	21/64	68
660117	12	0808	6530	3/64	20/64	50
660118	14	0640	4107	3/64	9/32	40

Prices on application.

#### **RUBBER-COVERED WIRES**



#### No. 14 Solid Duplex Wire

#### **Duplex Copper Conductors**

Duplex Rubber Covered Wire consists of two National Electrical Code, single braided wires laid parallel, with a braid over all. Wire of this construction is approved by the National Board of Fire Underwriters for use in unlined conduits while single conductor wires are required double braided when placed in unlined conduits.

#### **DUPLEX, SOLID**

List No.	Size B. & S. Gauge	Size in C. M.	Rubber Wall Inches	Diam. Over All Inches	Weight, Lbs. per 1000 Ft.
660119	8	16509	3/64	43/64	170
660120	10	10381	3/64	36/64	130
660121	12	6530	3/64	33/64	97
66012 <b>2</b>	14	4107	3/64	32/64	76

#### **DUPLEX, STRANDED**

List No.	Size B. & S.	Size	Rubber Wall	CONCENTR	IC STRANDS	Diam. Over All	Weight, Lbs.
2.00 1101	Gauge	in C. M.	Inches	No. Wires	Diam. Each	Inches	per 1000 Ft.
660123	1	83694	5/64	19	.067	1 15/64	820
660124	2	66373	1/16	19	.059	1 7/64	651
660125	3	52634	1/16	19	.052	1 2/64	540
660126	4	41742	1/16	7	.077	62/64	451
660127	5	33102	1/16	7	.069	57/64	375
660128	6	26250	1/16	7	.062	53/64	321
660129	8	16509	3/64	7	.048	48/64	205
660130	10	10381	3/64	7	.038	43/64	151
660131	12	6530	3/64	7	.032	20/32	111
660132	14	4107	3/64	7	.025	34/64	86

#### Fixture Wire

#### No. 18 Solid Conductor Fixture Wire

A single conductor wire, designed for wiring fixtures, show cases, etc., and furnished in solid or stranded conductor as wanted.

Solid conductor wires are tinned. This is not required, however, for stranded conductor, which takes a cotton wind in its place.

Conductors are insulated with new code compound and then covered with a saturated cotton braid or silk. Dry cotton can also be furnished, but is not generally required.

#### SOLID FIXTURE WIRE—N. E. C. STANDARD—TYPE F-32

The standard approved sizes are Nos. 16 and 18 B.&S. Can be used for wiring fixtures, without restriction, except where special forms of wire are required on account of temperature conditions.

List No.	Size B. & S. Gauge	Rubber Wall Inches	Diameter Over All Inches	Weight, Lbs. per 1000 Feet
660133	12	3/64	14/64	40
660134	14	3/64 3/64	12/64	34
660135	16	1/32	10/64	20
660136	18	1/32	9/64	16

#### SOLID FIXTURE WIRE-LIGHT INSULATION-TYPE F-64

Used for wiring fixtures, except for the wiring of chains and where special forms of wire are required, because of temperature conditions. Size No. 18 B.&S. is the only size permitted by the Underwriters. Silk-covered light fixture wire is recommended for use with especially small fixture stems, where the

Stranded fixture wire is recommended for use in movable stems.

660137	14	1/32	10/64	27
660138	16	1/64	9/64	16
660139	18	1/64	8/64	13
660140	20	1/64	7/64	11

Prices on application

regular is too large.

#### RUBBER-COVERED WIRES



No. 00 Stranded Double Braid Wire

#### Stranded Copper Conductors

Rubber-covered Stranded Conductors are made according to the specifications of the National Board of Fire Underwriters and each length is tested and stamped by the Wire Inspection Bureau before leaving the factory. The wires composing the conductors are thoroughly tinned and then laid up concentrically, giving the smallest diameter of any certain capacity. These conductors are pliable and are braided with cotton and saturated with a smooth and lasting compound, insuring their being readily handled in conduit work. The single braided conductors can also be finished with a white fireproof compound over the braid.

#### SINGLE BRAID

List No.	Size B. & S. Gauge	No. of Wires	Diameter of Each	Rubber Wall Inches	Diam. Over All Inches	Weight, Lbs. per 1000 Ft.
660151 660152 660153 660154 660155 660156 660157	8 10 12 14 16 18 20	7 7 7 7 7 3 3	048 038 032 025 018 023	3/64 3/64 3/64 3/64 1/32 1/32 1/32	21/64 19/64 17/64 15/64 14/64 13/64 12/64	93 64 48 36 29 23

#### DOUBLE BRAID

List No.	Size B. & S. Gauge	No. of Wires	Diameter of Each	Rubber Wall Inches	Diam. Over All Inches	Weight, Lbs per 1000 Ft
660158	0000	19	105	5/64	30/32	942
660159	000	19	094	5/64	56/64	782
660160	00	19	084	5/64	52/64	647
660161	0	19	074	5/64	47/64	526
660162	1	19	067	5/64	43/64	417
660163	2	19	059	1/16	39/64	329
660164	3	19	052	1/16	36/64	272
660165	4	7	077	1/16	34/64	227
660166	5	7	069	1/16	32/64	192
660167	6	7	062	1/16	29/64	164
660168	8	7	048	3/64	26/64	105
660169	10	7	038	3/64	24/64	72
660170	12	7	032	3/64	21/64	55
660171	14	7	025	3/64	19/64	41

Prices on application

Wire-Bare, Insulated and Strand

### **RUBBER-COVERED WIRES**



250000 C. M. Stranded Double Braid Cable

These stranded conductors are made according to the specifications of the National Board of Fire Underwriters and each length is tested and stamped before leaving the factory.

# Circular Mils Cables SINGLE BRAID

	Size Cir.	Concentr	IC STRANDS	Rubber Wall Inches	Diam. Over All Inches	Weight, Lbe
List No.	Mils	No. of Wires	Diam. of Each			per 1000 Ft.
660172	2000000	91	1485	1/8	1 60/64	7246
660173	1750000	92	138	1/8 1/8	1 56/64	6394
660174	1500000	91	1285	1/8	1 51/64	5539
660175	1250000	91	1175	1/8	1 43/64	4678
660176	1000000	61	128	7/64	1 1/2	3754
660177	950000	61	125	7/64	1 31/64	3581
660178	900000	61	122	7/64	1 28/64	340 <del>4</del>
660179	850000	61	118	7/64	1 26/64	3233
660180	800000	61	115	7/64	1 24/64	3058
660181	750000	61	111	7/64	1 22/64	2881
660182	700000	61	107	7/64	1 20/64	2709
660183	650000	61	104	7/64	1 18/64	2534
660184	600000	61	0995	7/64	1 16/64	2355
660185	550000	37	122	7/64	1 14/64	2182
660186	500000	38	.115	3/32	1 10/64	1959
660187	450000	37	111	3/32	1 7/64	1791
660188	400000	37	105	3/32	1 3/64	1608
660189	350000	37	098	3/32	1	1431
660190	300000	37	090	3/32	60/64	1250
660191	250000	37	083	3/32	56/64	1071

#### DOUBLE BRAID

660193	2000000	91	1485	1/8	2 5/64	7365
				1/0	1 59/64	6513
660194	1750000	92	138	1/8	1 56/64	5658
660195	1500000	91	1285	1/8 1/8		
660196	1250000	91	1175	1/8	1 52/64	4783
660197	1000000	61	128	7/64	1 40/64	3849
660198	950000	61	125	7/64	1 36/64	3676
660199	900000	61	122	7/64	1 34/64	3491
660200	850000	61	118	7/64	1 30/64	3310
660201	800000	61	115	7/64	1 32/64	3138
660202	750000	61	111	7/64	1 30/64	2956
660203	700000	61	107	7/64	1 28/64	2880
660204	650000	61	104	7/64	1 26/64	2600
660205	600000	61	0995	7/64	1 24/64	2418
660206	550000	<b>37</b>	122	7/64	1 22/64	2210
660207	500000	38	115	3/32	1 16/64	2010
660208	450000	37	iii	3/32 3/32	1 12/64	1840
660209	400000	37	105	3/32	1 11/64	1650
660210	350000	37	098	3/32	1 8/64	1468
			090	3/32 3/32	1 4/64	1285
660211	300000	37		9/32	1 1 1/02	1103
660212	250000	37	083	3/32	1 1	1100

Prices on application

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#### **RUBBER-COVERED WIRES**



No. 1 Flexible Double Braid Switchboard Cable

#### Flexible Switchboard Cables

These wires are all National Electrical Code Standard and are especially designed for switchboard, dynamo and motor connections.

List No.	Size B. & S. Gauge	Size in C. M.	Rubber Wall Inches	No. of Wires	Size of Wires	Diam. Over All, Ins.	Weight, Lbs per 1000 Ft.
660214	0000	211600	5/64	133	No. 18 B. & S.	53/64	791
660215	000	167805	5/64	134	No. 19 B. & S.	• 51/64	655
660216	00	133079	5/64	131	No. 20 B. & S.	46/64	541
660217	0	105592	5/64	133	No. 21 B. & S.	42/64	444
660218	1	83694	5/64	133	No. 22 B. & S.	40/64	366
660219	2	66373	1/16	133	No. 23 B. & S.	37/64	274
660220	3	52634	1/16	52	No. 20 B. & S.	32/64	225
660221	4	41742	1/16	52	No. 21 B. & S.	30/64	194
660222	5	33102	1/16	52	No. 22 B. & S.	28/64	159
660223	6	26250	1/16	50	No. 23 B. & S.	26/64	141
660224	8	16509	3/64	52	No. 25 B. & S.	24/64	86
660225	10	10381	3/64	33	No. 25 B. & S.	20/64	44
660226	12	6530	3/64	21	No. 25 B. & S.	18/64	36 26
660227	14	4107	3/64	14	No. 25 B. & S.	16/64	26

#### Stranding

### Standard, Flexible, and C. M. Conductors When Strands are not Specified the Following will be Furnished:

	STANDARD	STRANDS		FLEXIBL	E STRANDS			STAND. ST	RAND8	
B. & S. Gauge.	Strands	Stran'd Diam.	Wt.Lbs. per 1000 Ft.	Strands	Stran'd Diam.	Wt.Lbs. per 1000 Ft.	Size C. M.	Strands	Stran'd Diam.	Wt.Lbs. per 1000 Ft.
0000 000 00 00 1 2 3 4 5 6 8 8 10 12 14 16 18 20	19-105 19-094 19-084 19-067 19-059 19-052 7-077 7-069 7-062 7-048 7-038 7-032 7-018 5-018	.525 .470 .420 .370 .385 .295 .260 .231 .207 .186 .144 .114 .096 .075 .054 .050	655 525 420 325 266 206 160 130 104 84 51 32 23 13½ 7½ 5½ 3½	133040 133035 133032 133023 133023 105023 49028 49025 49023 52018 33018 21018 30012 20012 12012 7012	.600 .525 .480 .420 .375 .345 .325 .252 .225 .207 .162 .097 .080 .064 .052	712 550 440 355 284 225 176 138 110 85 55 23 151/2 9	250000 300000 350000 400000 450000 550000 650000 750000 800000 850000 950000 1000000 1250000	37082 37090 37098 37104 37116 42116 61099 68098 52116 56116 60116 67116 71116 61128 76128	1.044 1.090 1.125 1.16 1.152	770 915 1100 1260 1390 1540 1710 1840 2010 2160 2330 2500 2620 2790 2950 3150 3910
20,	3018	, .041	3 1/2	7012	.036	4	150000 150000 1750000 2000000	91128 107128 122128	1.408 1.557	3910 4650 5500 6280

#### Special Stranding

C. M. desired+by C. M. in wire to be used equals number of wires in strand.

#### EXAMPLE:

How many 18 B. & S. will be required to make 250,000 C. M. cable? 18 B. & S. = 1624 C. M. 250,000 C. M.+1624 C. M. = 154, the number of 18 B. & S. in 250,000 C. M.

When the number of wires in a strand is given, but not their size, this can be determined as follows:

When the number of wires in a strand is given, but not their size, this can be determined as follows: The C. M. required + by the number of wires required = mileage of each wire in strand. The square root of the mileage will give the diameter of wire to be used in stranding.

#### EXAMPLE:

What is the diameter of a wire necessary to make 1,000,000 C. M. of 427 strands? 1,000,000 C. M. ÷ 427 = 2342 C. M. of each wire. Square root of 2342 C. M. = .0484, the diameter of each wire in strand. Prices on application.

#### MINING AND PARK CABLES

#### Mining Machine Cable



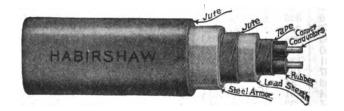
No. 4 Duplex Mining Machine Cable-Triple Braid

#### **DUPLEX**

Duplex Mining Machine Cable consists of flexible strands, rubber insulated to N. E. C. standard thickness. Each conductor is finished with a weatherproof braid and two conductors are then laid parallel and covered with two or three braids of hard cotton, which is then saturated with a weatherproof compound.

List No.	Size B. & S.	Diameter Inches	Aprx. Wt. Lbc per 1000 Ft.	L
660228	8	.85	186 )	
660229	6	. 95	284	Prices
660230	4	1.10	417	on
660231	3	1.20	498	Application
660232	2	1.30	606	1.ppcamon

#### Habirshaw Park and Suburban Cables



#### For Underground Work

These cables are composed of conductors of any size required. High grade rubber insulation of whatever thickness necessary for the operating voltage. The insulation is covered with a rubber filled tape, then a lead jacket varying with the size of the cable. Over the lead is first a heavy bed of jute and tar, then two steel tapes covered with jute and asphalt. The cables are made single, duplex or triple conductor, as required.

These cables are laid directly in the ground. All that is necessary for installing is a trench wide enough to hold the cable and deep enough so that the cable is from twelve to fifteen inches under ground. They are a cheap and reliable substitute for the duct system, where the expense of ducts is not justified.

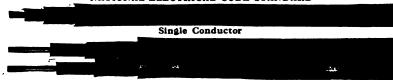
This method is not an experiment. It has been in successful operation for many years, and has proved as efficient, and much less expensive, than the duct system.

As prices will vary widely with cost of raw materials, and thickness of insulation required by operating voltage, no permanent price list can be prepared. Full information given on application. In writing please specify clearly all conditions of service. . Digitized by Google

Prices on application.

#### LEAD ENCASED COPPER WIRES

NATIONAL ELECTRICAL CODE STANDARD



#### **Duplex Conductor**

Leaded Wires and Cables
Rubber Covered—For 600 Volts or Less
These lead cables have walls of rubber; black core of National Code specifications. 'All conductors are taped and the stranded cables are of regular standard strand. The lead used is commercially pure, of thickness as shown in each case.

In the two conductor cables the two taped cores are laid flat and leaded. The three conductor cables have taped cores twisted with fillers to make them round. Over all there is placed tape and lead.

ALT.	SINGLE SOLID				DUPL	EX S	OLID	70.1	THREE	CON	IDUC'	TOR :	SOLID	
List No.	Gauge B & S	Lead	Diam- eter	Lbs. 1000 ft.	List No.	Gauge B & S		Diam- eter	Lbs. 1000 ft.	List No.	Gauge B & S	Lead	Diam- eter	Lbs. 1000 ft.
660939 660940 660941	19		.225	160	660969 660970 660971	20 19 18	1/32	.375	240	660946 660947 660948	19	3/64	.460	445
660942 660248 660249	14	3/64	.280	221	660972 660973 660974	16 14 12	3/64	.470	350	660949 660950 660951		1/16	.560	500 658 730
660250 660251 660252	8	3/64	.350	330	660975 660976 660977	10 8 6	1/16	.660	672	660952 660953 660954	8	1/16	.730	1150
660253 660254		1/16 1/16			660978 660979	5	- /							

SI	SINGLE STRANDED				DU	PLEX	STR	ANDE	D	11		TRAN	DED	OK
660943 660944 660945	14 12 10	3/64	.300 .310 .340	236 262 305	660980 660981 660982	14 12 10	3/64	.500 .530 .590	376 423 500	660955 660956 660957	14 12 10	1/16	.630	680 780 850
660255 660256 660257	8 6 5		.470	350 580 630	660983 660984 660985	8 6 5	1/16 1/16 1/16	.690 .810 .880	715 960 1060	660958 660959 660960	8 6 5	-/	.940	1075 1635 1800
660258 660259 660260	4 3 2	1/16 1/16 1/16	.520 .550 .580	690 768 845	660986 660987 660988	4 3 2	1/16 1/16 5/64	.810 .970 1.06	1165 1300 1650	660961 660962 660963	4 3 2	5/64 5/64 5/64	1.09	1970 2200 2480
660261 660262 660263	0 00	1/16 1/16 1/16	.660 .690 .730	1010 1150 1300	660989 660990 660991	1 0 00	5/64 5/64 5/64	1.22 1.28 1.38	2050 2290 2600	660964 660965 660966	1 0 00	3/32 3/32 3/32	1.44	3330 3760 4260
660264 660265	0000	-/	.780 .840	1480 1710	660992 660993	0000			2980 3450	660967 660968	0000	-,		4900 6085

CI	RC	UL	AR	MI	IS

List No.	Gauge B & S	Lead	Diameter	Lbs. 1000 ft.	List No.	Gauge B & S	Lead	Diameter	Lbs. 1000 ft.
660266 660267 660268	250000 C.M. 300000 C.M. 350000 C.M.	5/64 5/64 5/64	.950 1.020 1.080	2220 2480 2760	660278 660279 660280	850000 C.M. 900000 C.M. 950000 C.M.	3/32 3/32 3/32	1.500 1.530 1.560	5560 5800 6040
660269 660270 660271	400000 C.M. 450000 C.M. 500000 C.M.	5/64 5/64 5/64	1.110 1.190 1.200	3000 3280 3480	660281 660282 660283	1000000 C.M. 1250000 C.M. 1500000 C.M.	3/32 7/64 7/64	1.590 1.780 1.910	6270 7960 9100
660272 660273 660274	550000 C.M. 600000 C.M. 650000 C.M.	3/32 3/32 3/32	1.330 1.340 1.380	4160 4400 4650	660284 660285	1750000 C.M. 2000000 C.M.	7/64 7/64	2.030 2.120	10220 11300
660275 660276 660277	700000 C.M. 750000 C.M. 800000 C.M.	3/32 3/32 3/32	1.410 1.440 1.470	4870 5100 5330			C	oogl	-
Price	Prices on application.								

THREE CONDUCTOR

#### Flexible Cords

Flexibility is the predominating feature of our standard and special flexible cords and cables, as listed hereinafter. Every step in the manufacture of our products is carefully inspected and no expense is spared to produce the best obtainable flexible cords and cables.

Our aim is not only to meet the requirements, as set forth by the National Board of Fire Underwriters, but surpass them. A sample of Western Electric Flexible Cord, which we will gladly furnish,

will firmly convince you that it is a quality product.

A large stock of all standard cords is always available so as to give prompt and satisfactory service.



Method of Packing No. 18 Lampland Parallel Cords
Other Cords and Sizes Packed in Coils

#### PACKING—Lamp Cord

Lamp Cord is sealed in watertight and airtight packages, light, easy to handle and convenient to store in small spaces. Study the accompanying illustration.

The cartons are strong reinforced pasteboard boxes, each one bearing a full description of its contents.

Capacity—250 feet in coil form, uncoiling from center.

Four cartons are placed in one strong corrugated container, which is sealed with a heavy gummed strip bearing our trademark at short intervals. This forms our standard package, as illustrated.

Special Flexible Cords

Special flexible cords are packed in coil form, securely wrapped with burlap. Each coil is clearly labeled.

# Flexible Lamp and Reinforced Cords Description

The conductor consists of a number of small, annealed copper strands, each No. 30 B. & S. gauge, grouped into a cable of the required capacity. This conductor is then covered with a tight close wind of fine cotton, after which it is insulated with seamless rubber, and then covered with an ornamental braid of silk or cotton. Two of these finished conductors are then twisted around each other, or laid parallel, and braided over all with silk or cotton. Lamp cord is sold in three grades as designated, "New Code," "1909 Code," and "Commercial," which vary only in the thickness and quality of the rubber insulation enclosing the conductor.

#### **NEW CODE CORD**

This cord is made to conform to the latest National Electrical Code Standard which requires that a vulcanized rubber insulation conforming to stretch, breaking weight, electrical and chemical test be placed around each conductor, over which is placed the usual cotton or silk outer braid, and differs from the "1909

Code" only in the fact that the insulation is of a higher quality of rubber.

National Electrical Code Standard (New Code) requires 1-32 inch wall of rubber insulation on Nos.

18 and 16 cords, and 3-64 inch wall on No. 14 and larger cords. Three threads, two green and one red

thread, cabled with copper strands.

#### 1909 CODE CORD

This cord was known as "New Code" before the 1911 requirement of the National Board of Fire Underwriters specified the use of a higher quality of rubber in making up the insulation surrounding the conductor. The construction of the cord is identical with the New Code cord, with the exception that the rubber insulation is of a lower quality. It is no longer approved by the National Board of Fire Underwriters.

COMMERCIAL LAMP CORD

Commercial lamp cord has a seamless insulation of 1-64 inch rubber placed over a tight close wind of fine cotton over which is placed the usual cotton or silk outer braid. This cord is not approved by the National Board of this Underwriters. National Board of Pire Underwriters.

#### Western Electric Flexible Cords

The conductors of our regular cords are composed of a number of 30 B.&S. bare annealed copper strands, grouped into a cable of the required capacity, as follows: No. 8 B.&S., 165 strands; No. 10 B.&S., 104 strands; No. 12 B.&S., 65 strands; No. 14 B.&S., 41 strands; No. 16 B.&S., 26 strands; No. 18 B.&S., 16 strands; No. 20 B.&S., 10 strands; No. 22 B.&S., 7 strands. Sizes smaller than No. 18 are not approved by the Underwriters.

Seven Points to Cover When Ordering W. E. Flexcords

Am	nount	Size	Insulation	Conductors	Style	Finish	Color
	Feet	B.&S. Gauge	New Code 1909 Code Commercial	Single Pair Triple	Lamp Cord Parallel Cord Reinforced Cord Special Rein. Cord Special Cords	Silk Cotton Weatherproofed	Use Standard Colors as per Our Braid Color Card
Examples	500 250 500 250 250 250	18 20 16 14 16	New Code Commercial 1909 Code New Code 1909 Code	Twisted Pair Single *	Lamp Cord Lamp Cord Parallel Cord Reinforced Cord Reinforced Cord	Silk Cotton Silk Cotton Weatherproofed	Green Black Brown Black

<sup>\*</sup>Pair Conductor is always understood (unless otherwise specified) for parallel and reinforced cords. †Weatherproof finish is always black and need not be specified.

LIST OF COLORS

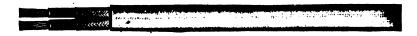
Cotton covered cords may be furnished in any of the following colors. Standard green and yellow, te, Yellow, Blue, Maroon, Green, Oak, Brown, Red, Black, Gray, Old G White, Maroon, Black, Old Gold Silk covered cords may be furnished in any of the following colors. Gilt, Old Gold, Copper, Bronze, Tiffany Green, Dark Green, Red, Maroon Brass, Old Brass, Green, Olive Green, Light Green, Brown, Navy Blue, Black White, Silver, Yellow, Gold, TABLE OF WEIGHTS (LBS.) PER 1000 FEET

Size	Insulation	-Lamp Co	rds	Parallel Co	ords	Rein	orced Cords-	
		Cotton	Silk	Cotton	Silk	Cotton	Silk	Wp.
12 B.&S.	∫ New Code	83	79	85	82	178	172	187
12 D.&S.	\ 1 in. Wall	60	<b>52</b>	64	56	108	104	114
14 B.&S.	∫ New Code	· 63	- 59	65	62	. 133	128	141
14 D.G.S.	\ data in. Wall	37	35	40	3	<b>7</b> 9	75.5	85
16 B.&S.	∫ New Code	37	34	<b>38</b>	<b>3</b> 6	<b>7</b> 5	70.5	80
10 D.&B.	\ in. Wall	<b>26</b>	24	27	25.	<b>52</b>	49	57
18 B.&S.	∫ New Code	27	25	29	27	· 64	60	69
10 D.00.	\ data in. Wall	19	17	20	18	43	<b>4</b> 0	47
20 B.&S.	∫ New Code	22	19	23	21	51	47.5	56
20 D.&S.	🕽 🔂 in. Wall	13.5	12	14.5	13	32	<b>29.5</b>	36
22 B.&S.	∫ New Code	18	16	19	17	43	39	48
22 D.00.	in. Wall	10.5	9	11	10	<b>2</b> 6.5	24	30

Note: 1909 Code Cords, weight the same as New Code. Commercial Cords, weight the same as A inch Wall. The above weights are all based on pair conductors.



Lamp Cord—Type C. Single or twisted pair with cotton or silk braid over each conductor



Parallel Cord—Type PO. Has cotton braid over each of two conductors laid parallel under cotton or silk outer braid.



Reinforced Cord—Type P. Has cotton braid over each conductor twisted together and covered with a rubber jacket, then braided over all with a hard glazed cotton.

Reinforced Cord WP.—Type PWP. Same as Type P except outer braid is saturated and finished with a weatherproofed compound.

Special Reinforced Cord—Type PS. Underwriters only permit this cord in sizes Nos. 18 and 16

for office and dwelling only where appearance is essential.

tinch wall of New Code insulation with cotton braid over each conductor, twisted together and covered with a rubber jacket to make round, then braided over all with either silk or hard glazed cotton.

#### INTERIOR COPPER WIRES AND CABLES



#### Annunciator Wire

#### Regular

Insulated with two winds of cotton yarn applied in opposite directions, saturated with a special wax compound and highly polished. This makes a very compact insulation. Furnished either on spools containing about 8 lbs., or exactly 1 lb. and in 1 lb. coils, and packed in cases containing approximately 200 lbs. Furnished in colors and styles as follows—either plain copper or tinned; plain copper furnished unless otherwise ordered; red, blue, red and white, brown, white, olive, yellow, blue and white.

	Single Condu	ctor		Twisted Pairs	
	•	Weight		Weight	
List No.	Size B. & S.	Lbs. per 1000 Ft.	List No.	Size B. & S.	Lbs. per 1000 Ft.
660422	14	15	660426	14	30
660423	16	9.5	660427	16	19
660424	18	6.5	660428	18	13
660425	20	4.5	660429	20	9

#### Weatherproof Annunciator Wire

The construction of this wire is the same as regular annunciator wire except that the cotton wrapping is saturated with black weatherproof compound.

List No.	Size B. & S.	Weight Lbs. per 1000 Ft.	List No.	Size B. & S.	Weight Lbs. per 1000 Ft.
660430	14	16.6	660433	20	5.0
660431	16	11.1	660434	22	3.1
660432	18	7.7			

#### Damp-proof Office Wire



No. 18-Single Conductor Damp-proof Office Wire

This wire is double wound and braided, the two winds of cotton yarn applied in opposite directions, saturated with black weatherproof compound.

The braid is specially treated with wax, highly polished, and will not collect dust. Office wire is carried regularly in the following colors: red, red and white, blue, blue and white. It is put up in coils of about 17 lbs. each. and packed in cases of approximately 200 lbs. each.

#### Single Conductor

List No. 660435 660436	Size B. & S. 14 16	Weight Lbs. per 1000 Ft. 24 13.5	List No. 660437 660438	Size B. & S. 18 20	Weight Lbs. per 1000 Ft. 10 8
		Double] C	onductor		
660439 660440	1 <u>4</u> 16	55 34	660441 660442	18 <b>20</b>	25 20

#### **Annunciator Cables**

This cable is designed for connecting the annunciator in an elevator car with the push buttons on the different floors.

Each conductor is composed of 16 strands of No. 30 B. & S. gauge soft untinned copper wire and insulated with two reverse wrappings of cotton and one cotton braid. The insulated conductors are then cabled with a steel supporting strand, where necessary to give extra tensile strength, then covered with two cotton braids. This is a dry cable and the outer braids are flameproof Digitized by Prices on application.

# Western Electric

#### TELEPHONE WIRES

The materials entering into the construction of our telephone wires are of the best quality; this fact combined with the rigid inspection maintained throughout the entire process of manufacture insures a "quality product."

The conductors of all these wires are thoroughly tinned. The insulation is of a high quality rubber compound and varies in thickness according to the size and requirements of the different wires; over this is placed a weatherproof braid, or when wanted for inside use a glazed cotton braid of any standard color combination.



Outside Telephone Wire

#### Outside Telephone Wires

These wires are furnished in coils, each coil carefully wrapped. Single conductor can be supplied when specified. COPPER STEEL OUTSIDE WIRE

Gauge *17 B.&S. †14 B.&S. *This w †This w	Braid Twisted pair, weatherproof braid Twisted pair, weatherproof braid rire has very largely replaced No. 14 B.&S. copper drop wire. vire is very often spoken of as copper drop wire.	Wgt. per 1000 Ft. (Tw. Pair) 36 lbs. 63 lbs.	Coil Lengths 200-1500 ft. 200-1500 ft.
18 B.&S.	BRIDLE WIRE Twisted pair, weatherproof braid	33 lbs.	200–1500 ft.
16 B.&S.		42 lbs.	200–1500 ft.



Inside Telephone Wire

#### Inside Telephone Wires

٠	Gauge		Ft. (Tw. Pair)	Coil Length
	9 B.&S.	Twisted pair, olive green finished braid	22 lbs.	200-1500 ft.
	Furnisl Can be	in barrels, each coil specially wrapped in heavy craft paper.  ned in single or triple conductors when specified.  furnished in any color required, standard color being olive green.  er thread is used in all conductors.		

#### Flameproof Wire

### Flameproof Wires

Gauge		Finish	Ft. (Tw. Pair)	Coil Lengths
20 B.&S.	Single, twisted or triple conducto	Standard color, slate and red	38 lbs.	200–1500 ft.
	Single, twisted or triple conductor	Standard color, slate and red	19 lbs.	200–1500 ft.
	Single, twisted or triple conductor	Standard color, slate and red	16 lbs.	200–1500 ft.

#### Single Ground Wire

#### Single Ground Wires

		weight per	
Gauge		1000 Feet	Coil Length
	Single ground wire	14 lbs.	200–1500 ft.

Also furnished in size No. 14 B.&S. These wires are often spoken of as sub-station wires.

Wire—Bare, Insulated and Strand

Wainha man

Weight per

### Western Electric

#### **TELEGRAPH WIRES**

These wires are furnished in strict accordance with the standard specifications of the largest telegraph companies of this country. They are a high-class product and can be furnished in all sizes as required. The sizes ordinarily specified are Nos. 14, 16, 18 single and twisted, with a weatherproof braid, and No. 18 in twisted pair and triple, with brown and black braid. Flameproof wires in size No. 16 single and twisted are also used by the telegraph companies.



Pot Head Wire

### Western Electric

#### Pot Head Wires

The standard wire for pot head work is either 19, 20 or 22 B.&S. gauge in single or twisted conductor. The insulation of this wire is of high quality, suitable to withstand the effects of the hot sealing compound and outside exposure without a protecting braid. As a distinguishing marker one conductor of the twisted pair has a double ridge on the insulation. Make sure in ordering this wire that it has the double ridge, as this insures you a "quality product."

Weight per 1000 feet (twisted pair), 19 lbs. Coil Lengths, 200-1500 feet.

		1000 Feet,	
Gauge		Twisted Pair	Coil Length
19, 20 or 22 B.&S.	Pot-head wire	19 lbs.	200-1500 ft.

### Western Electric

GALVANIZED ARMCO

#### Iron Outside Drop Wire

A special drop wire which is stronger and lighter than copper and quite as flexible. The conductor is a high-grade non-rusting iron. It is insulated with good grade rubber compound, cotton braided and weatherproofed. The sizes most generally used are as follows:

Gauge	Description
19 BWG (18 B.&S.),	inch diameter, insulation twisted pair outside wire.
18 BWG (16 B.&S.),	inch diameter, insulation twisted pair outside wire.
16 BWG (14 B.&S.),	<sup>5</sup> / <sub>32</sub> inch diameter, insulation twisted pair outside wire.
14 BWG (12 B.&S.),	the inch diameter, insulation twisted pair outside wire.

## Diameters by Different Wire Gauges DIAMETERS IN MILS. 1 MIL=0.001 INCH

Gauge				Gauge			
No.	B.&S.	S.W.G.	N.B.S.	No.	B.&S.	S.W.G.	N.B.S.
0000	460	454	400	14	64	83	. 80
000	410	425	372	15	57	72	72
00	365	880	348	16	51	65	64
0	325	340	324	17	45	<b>58</b>	56
1	289	300	300	18	40	49	48
2	258	<b>284</b>	276	19	36	42	40
3	229	259	252	20	32	35	36
4	204	238	232	21	28.5	32	32
5	182	220	212	22	25.3	28	28
6	162	203	192	23	22.6	25	24
7	144	180 ·	176	24	20.1	22	22
8	128	165	160	25	17.9	20	20
9	114	148	144	26	15.9	18	18
10	102	134	128	27	14.2	16	16.4
11	91	120	116	28	12.6	14	14.8
12	81	109	104	29	11.3	13	13.6
13	72	95	92	30	Digi <b>10-0</b> by	009126	12.4

Wire-Bare, Insulated and Strand

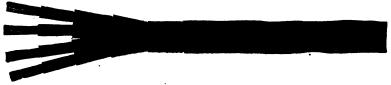
Special Flexible Cords



#### Deck Cable

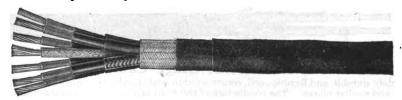
A watertight flexible cord, made to stand severe abrasion. It is especially designed for use on boat decks and is made as follows: Two conductors of new code cotton braided cord, twisted together, reinforced by jute, and a rubber jacket, over which is then placed one cotton braid thoroughly saturated and weather-proofed.

		Approx. Weight			Approx. Weight
Size	Diameter	Lbs. per	Size	Diameter	Lbs. per
В. & 🕄	Inches	1000 Ft.	B. & S.	Inches	1000 Ft.
10	.730	182	16	.505	65
12	.665	144	18	.485	52
14	.650	112	۱	• • • •	• •



#### Border Light Cable

A stage cable made up of usually more than two conductors.



#### Elevator Cable

An extremely flexible and durable cord, especially constructed for elevator control and lighting. The conductors of this cable (usually more than two) are constructed in the usual way of New Code cord. These conductors are then grouped together and covered with three cotton braids, the outer one weatherproofed. A steel supporting strand running through the center is usually required, and this adds materially to the strength of the cable.



#### Heater Cord

The conductor consists of a number of small copper strands grouped into a cable of the required capacity, cotton wrapped, insulated with a thin wall of rubber compound, asbestos braided. Two of these finished conductors are then twisted together and braided over all with cotton of any desired color combination. Standard color is black and brown. This cord can also be furnished in parallel form.

Size B. & S.	Diameter Inches	Approx. Weight Lbs. per 1000 Ft.	Size B. & S.	Ap Diameter Inches	prox. Weight Lbs. per 1000 Ft.
18 16 14	.310 .330 . <b>345</b>	34 44 58	12 10 	aso Googl	80 105 
		18-1	l .	Wire—Bare, Insulated	and Strand

#### Special Flexible Cords



#### **Brewery Cord**

A weatherproof lamp cord which conforms in all respects with the requirements of the National Board of Fire Underwriters. This is a specially designed cord for use in breweries and other places where dampness is prevalent.

Size B. & S.	Diameter Inches	Approx. Weight Lbs. per 1000 Ft.	Size	Diameter Inches	Approx. Weight Lbs. per 1000 Ft.
10 12 14	.540 .480 .460	130 95 72	• 16 18	.360 .340	46 35 ••
		_ •			

#### Canvasite Cord

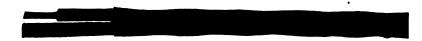
An acidproof flexible cord, unusually tough and durable. This is especially designed for use in dyeing establishments, cold storage plants, tanneries and other places where mechanical and chemical conditions are severe. It is made up similar to Brewery Cord except that it has an extra weatherproof braid over the twisted conductors.

Size B. & S.	Diameter Inches	Approx. Weight Lbs. per 1000 Ft.	Size . B. & S.	Diameter Inches	Approx. Weight Lbs. per 1000 Ft.
10 12 14	.600 .540 .520	144 98 82	16 18 	.400 .380	50 38 ••

Theater or Stage Cable

An extremely durable and flexible cord, constructed to withstand severe abrasion such as is found on theater stages and similar places. The conductors of this cord are constructed in the usual manner of New Code cord. They are then reinforced with jute and a rubber jacket. It is then covered with an outer weatherproof braid.

Size B. & S.	Diameter Inches	Approx. Weight Lbs. per 1000 Ft.	Size B. & S.	Diameter Inches	Approx. Weight Lbs. per 1000 Ft.
2 3 4 5 6	1.110 1.000 .925 .870 .830	620 525 435 395 310	8 10 12 14	.740 .665 .600 .585	195 140 106 80



#### Packing House Cord

Especially constructed for use in packing houses. The conductors of this cord are constructed in the usual way for New Code cord. The twisted conductors are then reinforced with jute and a cotton outer braid weatherproofed.

Size B. & S.	Diameter Inches	Approx. Weight Lbs. per 1000 Ft.	Size B. & S.	Diameter Inches	Approx. Weight Lbs. per 1000 Ft.
10	.665	140	16	.440	49
12	.600	106	18	<b>,420</b>	38
14	.585	80	٠.	Digitized by 1.300816	• •
Wire—Bare,	Insulated and Strand	. 18	-2		

#### DELTABESTON WIRES



#### Deltabeston Heater Cord

Stranded Conductor

For service where rubber is not necessary Deltabeston heater cord is manufactured wherein each conductor is insulated with a .025 inch wall of pure asbestos fiber. This is thoroughly filled with a compound which gives it high dielectric strength and provides a very tough and pliable insulation.

For an all fireproof cord the twisted conductors are covered with an asbestos braid, but where this is not

essential, cotton braid is supplied in any colors required.

Approved by the Underwriters' Laboratories, Inc.

	With .	Asbestos Braid			With (	Cotton Braid	
Size B.&S. Gauge	Style	Approx. Weight per 1000 Feet Lbs.	List Price per 100 Ft.	Size B.&S. Gauge	Style	Approx. Weight per 1000 Feet Lbs.	List Price per 100 Ft.
12 14 16 18	A A A A	82 60 43 34	\$28.00 21.00 15.00 12.00	12 14 16 18	CCCC	65 45 · 30 22	Prices on Appli- cation
	_						

All sizes put up on 250 foot spools. In ordering specify the style required.



#### Deltabeston Switchboard Wire

Solid Conductor

The insulation on this wire consists of a .025 inch wall of standard high-grade pure asbestos fiber, thoroughly filled with a moisture-proof compound which gives it very high dielectric strength and an exceptionally tough finish. Over this is braided an asbestos covering which can be furnished in either black or white finish. Approved by the Underwriters' Laboratories, Inc.

Size B.&S. Gauge	Approx. Thickness Asbestos Wall Mils.	Approx. Diameter Overall Inches	Approx. Weight per 1000 Feet Lbs.	List Price per 100 Feet
6 8 10 12 14	.029 .027 .025 .022 .020	19/64 1/4 7/32 13/64 3/16	110 75 50 35 25	Prices on Appli- cation

All sizes put up in 1000 foot coils.

In ordering specify whether black or white finish is desired.



### Deltabeston Moving Picture Machine Cable

Stranded Conductor

The stranded conductor is insulated with a wall of compactly applied asbestos fiber over which is woven an asbestos braided covering. The outer covering is treated with a compound which completely saturates the braid producing a smooth finish and rendering it moisture-proof.

This cable is widely used for the wiring of moving picture projectors, search lights, railway controllers,

cranes and other devices in which the wires are subjected to high temperatures.

Approved by the Underwriters' Laboratories, Inc.

	Conduc	tor	Approx.	Approx.	Approx.	List
Size B.&S. Gauge	No. of Wires	B.&S. Gauge of Each Wire	Thickness Asbestos Wall Mils.	Diameter Over All Inches	Weight per 1000 Feet Lbs.	Price per 100 Feet
1 2	133 133	No. 22 No. 23	.035 .034	$\frac{17/32}{31/64}$	310 255	
4	82	No. 23	.032	13/32	170	Prices
6 8	84 52	No. 25 No. 25	.029 .027	$\frac{11/32}{19/64}$	115 75	on Appli-
10 12	104 65	No. 30 No. 30	$.025\\.022$	15/64 13/64	50 35	cation
14	41	No. 30	.020	$\frac{7}{7}$	25	

The cables listed above are flexible and are furnished with the strandings indicated unless otherwise spec-. Prices on special stranding quoted upon request.

Delivery F. O. B. Providence, R. I. For warehouse deliveries write nearest house.  $JIQOO_{\mathbb{Z}}$ 

#### **DELTABESTON WIRES**



#### **Deltabeston Stove Wire**

Solid Conductor

This wire is insulated with a wall of especially treated asbestos fiber over which is woven an asbestos braided covering.

This wire is approved by the Underwriters' Laboratories, Inc. for the wiring of electric stoves and ranges

in and around ovens, in boiler rooms and similar places where excessive moisture is not present.

Approx. Weight List
per 1000 Feet Price per
Lbs. 100 Feet
105 70 Prices 00 45 Appli- 20 cation

#### Deltabeston Fixture Wire

Stranded Conductor

This wire is insulated with an .025 inch wall of the best grade of asbestos fiber, purified by a special process.

Deltabeston fixture wire is recommended for all classes of fixture wiring including fixtures for gas filled incandescent lamps, car fixtures, and is especially adapted for fixtures in which the temperatures liable to be attained by some parts are such as to render the use of rubber covered wires or cords either undesirable or impracticable.

Deltabeston fixture wire is smooth and flexible so that it may be "fished" through fixtures with the ut-

most ease.

This wiring is approved by the Underwriters' Laboratories, Inc., for wiring fixtures.

		uctor	Approx. Diameter		
Size	No.	B.&S. Gauge	Over	Approx. Weight	List
B.&S.	of	of Each	Insulation	Lbs. per	Price per
Gauge	Wires	Wire	Inches	1000 Feet	100 Feet
14	41	No. 30	.125	18	Prices
16	<b>26</b>	No. 30	.110	12	on
18	16	No. 30	.100	9	Application
All siz	es put up on 250	) foot spools.			

#### Deltabeston Fixture Wire with Silk Covering

Stranded Conductor

This wire is supplied in single and parallel or twisted twin conductors. The latter is manufactured in two forms. One style has each conductor braided separately with a silk covering and the two then twisted together. The other has the two asbestos insulated conductors first twisted together and finally braided with the silk covering. In ordering, the style should be specified.

If it is desired, an outer covering of cotton may be substituted for the silk.

These wires are approved by the Underwriters' Laboratories, Inc., for wiring fixtures.

	Condu	ictor———	Approx. Diameter		
Size B.&S. Gauge	No. of Wires	B.&S. Gauge of Each Wire	Over Insulation Inches	Approx. Wt., Lbs. per 1000 Feet	List Price per 100 Feet
14	41	No. 30	.145	19	Prices
16	<b>26</b>	No. 30	.130	13	on
18	16	No. 30	.120	10	Application

Single Conductor

All sizes put up on 250 foot spools.

	Paralle	el and Twisted Pair Conductors		
Size B.&S.	Approx. Weight Lb	s. per 1000 Feet——	List Price	per 100 Feet-
Gauge	Parallel Parallel	Twisted	Parallel	Twisted
14 '	38	40	\$12.60	Prices
16	26	<b>2</b> 8	9.80	on
18	20	21	8.40	Application

All sizes put up on 250 foot spools. Delivery F. O. B. Factory Providence, R. I. For warehouse deliveries write nearest house.

Wire-Bare, Insulated and Strand

#### Special Flexible Cords



#### Vacuum Cleaner Cord

As the result of careful study and observation, we offer to the trade this especially constructed cord for vacuum cleaners. It has all the strength desired and yet is small in size and extremely flexible. A cord better adapted for this purpose cannot be made.

The conductors of this cord are composed of a number of flexible copper strands, assembled into a cable having extreme flexibility. Cotton wrapped, insulated with 1/64 inch wall of New Code rubber compound and cotton braided. A rubber jacket of New Code insulation is then placed over the twisted conductors, after which it is braided with a close non-fraying braid of fast black cotton.

Size B. & S. 18	Diameter Inches .280	Approx. Weight Lbs. per 1000 Ft. 44	ll Size	Diameter Inches . 300	Approx. Weight Lbs. per 1000 Ft. 65

No. 2-49 Strand Flexible Car Wire,

#### Car Wire

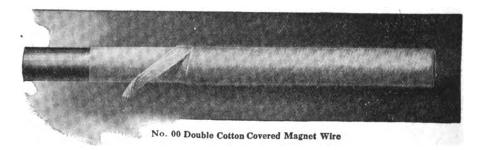
This wire is made in two styles, stranded or 7 wire, and flexible or 49 wire. The strand is covered with a wrap of cotton or paper, after which a coating of rubber is applied conforming to N. E. C. specifications. It is then covered with one, two or three braids, as specified.

		Approx. Weight	lf .		Approx. Weight
Size	Diameter	Lbs. per	Size	Diameter -	Lbs. per
B. & S.	Inches	1000 Ft.	B. & S.	Inches	1000 Ft.
1	.560	387	5	400	173
· 2	.490	<b>30</b> 3	6	.380	147
3	.460	249	8	.320	93
4	.430	207			

#### Bell Cord

Is designed for small bell and battery use. The conductors are composed of a few strands of soft copper assembled into a small cable. A cotton braid is then applied over each conductor. These are then twisted together and a silk braid placed over all. This cord can be furnished in any of our standard silk shades. (Standard green.)

#### MAGNET WIRE



### Western Electric Cotton Covered Magnet Wire

Sizes No. 0000 to 19 Inc. Single and Double Cotton To obtain prices add to latest w

Size	Size Round		Asbestos Square		Rectangular				
B.&S. Gauge	S.C.C.	D.C.C.	T.C.C.	and S.C.C.	D.C.C.	T.C.C.	‡Square Mils.	D.C.C.	T.C.C.
4/0 to 6 7 8	Base .001/4 .001/2	.001/4	.01½ .01½ .02	.00¾ .01 .01½	$.01\frac{14}{12}$ $.01\frac{14}{12}$ $.02$	.023/4 .03 .031/2	3001 and over 25001 to 30000 20001 to 25000 15001 to 20000	.02 .02¼ .02¾ .03¾	.03¼ .03½ .04¼ .05¼
9 10 11	.00¾ .01 .01½	.01½ .02 .02½	.02½ .03¼ .04	.02	.02½ .03 .03½	.04 .04 <sup>3</sup> / <sub>4</sub> .05 <sup>1</sup> / <sub>2</sub>	10001 to 15000 9001 to 10000 8001 to 9000 7001 to 8000	.0434 .0534 .0634 .0734	.06½ .07½ .08¾ .10
12 13 14	.02 .02½ .03	.03 .03¾ .04½	.04¾ .06 .07¼		.04 .051/4 .06	.06¼ .08 .09	6001 to 7000 5001 to 6000 4001 to 5000 3001 to 4000	.0834 .1034 .1234 .1534	.11 .13½ .16
15 16 17	.03½ .04 .04½	.05¼ .06 .07	.08½ .09¾ .11¼	D	Asbestos and D.C.C. Same		2501 to 3000 2001 to 2500 1501 to 2000 1001 to 1500	.1834 .2334 .3034 .4534	:::::
18 19	.051/4	.08	.1234	Pr	ice as T.C.(	٠.	501 to 1000 500 and under	.65%	

The width multiplied by the thickness equals square mils.

Freight Additions for Above Sizes

			Add for Freight per 100 Ll	os. Net-				
	*	Carloads			Carloads		-1	Carloads
	Less	Min.	),	Less	Min.		Less	Min.
	Than	Wt.		Than	Wt.	1 1 1 1 1 1 1	Than	Wt.
To	Car	30000		Car	30000	100000000000000000000000000000000000000	Car	30000
Arizona	Loads	Lbs.	To	Loads	Lbs.		Loads	Lbs.
Alabama	1.10	\$2.60	Louisiana	\$0.60		Ohio	\$0.20	\$0.05
Arkansas	.75	. 60	Maine	. 15		Oklahoma	1.75	.95
California	*1 65					Oregon	*1.65	*1.10
Colorado	+9 95	*1.101	I M ASSACHUSELLS	0.5		Pennsylvania	.05	.00
Connecticut	.05	11.20	Michigan	.25		Rhode Island	.05	.00
Delaware	.05	.00	Minnesota	. 60		South Carolina		.55
Dist. of Columbia		.00	Mississippi	.90		South Dakota.	1.25	.75
Florida		45	Missouri	.60		Tennessee	. 60	.30
Georgia		55	Montana	2.60		Texas	†1.25	1.85
Idaho	3.10	2 10	Nebraska	1.00	.50	Utah		†1.85
Illinois	. 35	10	New Hampshire		00	Vermont	.10	.00
Indiana	.35	10	New Hampshire	.05	.00		.25	.05
Indian Territory .	1.75	95	New Jersey. New Mexico.	.05	.00		*1.65	*1.10
Iowa	. 65	35	Nam Vork	2.50		West Virginia	.25	.05
Kansas	1.20	70	New York. North Carolina.	.05		Wisconsin	.60	.20
Kentucky		20	North Dakota	1.25	.25	Wyoming	2.50	1.75
+In the States		J - T	1 TV I A COLOR	1,20	.75			

the States of Colorado, Texas and Utah freight rates shall cover so-called common points only, or those taking a lower rate. To all other points in Colorado, Texas and Utah which take a higher rate than to common points the delivery price shall be made by adding to the freight rate for common points the local rate from the nearest common point to the point of delivery.

Salt Lake City and Provost are arbitrarily made the only common points in Utah.

\*Coast terminal points are:

San Francisco

San Diego

Portland

Sacramento Los Angeles

San Diego Tacoma Stockton

Portland Mt. Vernon Oakland

Astoria

Astoria

Seattle

Marysville

On sales to other than coast terminal points local freight must be paid by the purchaser.

Nors: Freight will be allowed on all shipments of 100 lbs. or over, east of the Mississippi River; west of the Mississippi River on 200 lbs. or over.

Shipments less than 100 lbs. are F. O. B. cars Ansonia, and carry the Connecticut delivery charge

Boxing and Reel Charges and Allowances. On all shipments of magnet wire from factory an extra charge of \$1.50 Net is made for a reel, 75 cents Net for a 50 lb. spool and 50 cents Net for a 25 lb. spool; and in additions boxing charge of from 50 cents to \$1.50 is made; both of which charges are refunded when the reel or spool is received at factory in good condition.

#### MAGNET AND BINDING WIRE

#### "Deltabeston" Magnet Wire

#### Round and Rectangular



This wire is particularly adapted to field and armature coil winding. The insulation is an asbestos composition designed to stand extraordinary temperature, which particularly adapts it to street railway and similar use, where motors and generators experience very severe overloads. Attempts at imitation of this wire have been made without success. The trade name, "Deltabeston," represents the wire of this character that has proven its merit.

Deltabeston magnet wire, while generally used in the round type, is also manufactured in wire of a rectangular cross-section. The advantages of square or flat wires are numerous. Much greater copper section can be put into a given winding space by the use of rectangular wires, than by employing round conductors. This is

due to the fact that the small interstices necessarily occurring between adjacent round wires are practically eliminated when flat-sided wire is used.

Size B. & S.	Approx. Feet	List No.	Size B. & S.	Approx. Feet	List No.
Gauge	per Lb.	Round	Gauge	per Lb.	Round
0	3.078	660613	13	61.07	660639
1	3.880	660614	14	76.62	660640
2 ·	4.873	660615	15	95.99	660641
3	6.136	660616	16	120.0	660642
4	7.731	660617	17	150.4	660643
5	9.719	660618	18	188.0	660644
6	12.22	660619	19	233.5	660645
7	15.35	660620	20	290.8	660646
8	19.38	660621	21	363.5	660647
9	24.34	660622	22	449.9	660648
10	30.49	660623	23	549.1	660649
11	38.47	660624	24	682.7	660650
12	48.27	660625	25	834.4	660651

Note: Square, flat and stranded "Deltabeston" wire is also manufactured. Prices on application.

#### Tinned Steel Binding Wire

This is a tinned steel wire which has no equal for armsture binding. Its tensile strength is over 200,000 tibs. per sq. in. It is heavily and evenly tinned and true gauge.

List No.	B & S Gauge	List Price per 100 Lbs.	List No.	B & S Gauge	List Price per 100 Lbs.
660665 660933 660934 660935 660936 660994 660995 660666 660667	No. 10 No. 11 No. 12 No. 13 No. 14 No. 15 No. 16 No. 17 No. 18	Prices on Application	660668 660669 660670 660671 660672 660673 660674	No. 19 No. 20 No. 21 No. 22 No. 23 No. 24 No. 25 No. 26	Prices on Application

#### Phosphor Bronze Binding Wire

This wire is tinned for use in binding armatures and is finished smooth to gauge and ready to take solder with acid. It has high elastic limit and tensile strength.

List No.	Gauge B. & S	Diam.	List Price per Lb.	List No.	Gauge B. & S.	Diam.	List Price per Lb.
660678 660679 660680 660681 660682 660683	10 11 12 13 14 15	.101890 .090743 .080808 .071961 064084 057068	Prices on Application	660684 660685 660686 660687 660688	16 17 18 19 20	.050820 .045257 .040303 .035890 .031961	Prices on Application
	61		2:	2	Wire	-Bore. Insulat	ed and Strang

# BARE COPPER WIRE Trolley Wire







Hard drawn trolley wires are furnished in any of the standard styles, round, grooved or figure 8. Sizes 4/0 and 3/0 are put up in  $\frac{1}{2}$  mile lengths, 2/0 and 1/0 are furnished in  $\frac{1}{2}$  or 1 mile lengths. The cross sections of the various styles and sizes are shown above. The grooved shown is American Standard.

Size B. & S.	List No.	List No.	List No.	Approximat	e Wgt., Pounds	Electrical Conductivity
	Round	Grooved	Figure 8	Per Mile	Per 1000 Feet	(Minimum)
0 00 000 0000	660774 660775 660776 660777	660778 660779 660780 660781	660782 660783 660784 660785	1685 2132 2690 3386	319 404 509 641	Mile—ohm @ 68 de- grees Fahr., not to ex- ceed 890,1 equals 98% Matthiessen's Standard.

#### Copper Line Wire

#### Hard Drawn or Annealed

These wires are drawn accurately to gauge according to specification. They are of high conductivity and tensile strength.

All copper wires are regularly drawn to B. & S. gauge and annealed, and all orders will be filled accordingly, unless otherwise stated.

Put up in	Pounds per Mile	Per 1000 Feet Lbs.	Capacity Circular Mils	Diameter in Mils	Size B. & S. Gauge	List No.
	3376 2677	639 507	211600 167803	460 410	0000	660786 660787
1			133079	365	000	660788
	2123 1684	402 319	105534	325	0	660789
	1335	253	83694	289	1	660790
	1059	201	66373	258	2	660791
200-lb. Coils.	840	159	52634	229	3 4	660792
	666	126	41743	204	4	660793
	528	100	33102	182	5	660794
	419	79	26251	162	6	660795
i	332	63	20817	144	7	660796
	263	50	16510	. 128	8	660797
	209	40	13094	114	9	660798
l .	166	31	10382	102	10	660799
<b>{</b>	131	25	8234	91	ii	660800
1	104	20	6530	81	12	660801
100-lb. Coils.						
	83	16	5178	72	13	660802
J	66	13	4107	64	14	660803
1	52	10	3257	57	15	660804
1	41	8	2583	51	16	660805
50-lb. Coils.	33	6	2048	45	17	660806
South Com.	26	5	1624	40	18	660807
1	21	4	1288	36	19	660808
1	16	3	1022	32	20	660809

Also put up in long lengths on recls, as desired. Prices on application.

#### BARE COPPER WIRE



Concentric Strande

#### Bare Copper Concentric Strand Wire

All strands are concentric laid, giving the smallest outside diameter for any certain capacity. Unless otherwise specified, cables will be furnished according to regular style of stranding. The table shows the diameter in mils of wire used according to the number of wires of which the strand is composed.

Capacity	Wei	ight	Regul of Sta	ar Style	Diam.	Capacity	We	ight		ar Style randing	Diam.
Circular Mils	Per 1000 ft.	Per Mile	No. Wires	Diam. Each	Strand, Mils	Circular Mils	Per 1000 ft.	Per Mile	No. Wires	Diam. Each	Strand, Mils
2000000	6180	32640	91	148	1630	300000	927	4896	37	90	630
1750000	5409	28560	91	139	1530	250000	772	4080	37	82	574
1500000	4635	24480	91	128	1410	4/0 B. & S.	652	3442	19	105	525
1250000	3864	20400	91	117	1288	3/0 B. & S.	517	2730	19	94	470
1000000	3090	16320	61	128	1151	2/0 B. & S.	410	2165	19	84	420
950000	2936	15504	61	125	1125	1/0 B. & S.	325	1717	19	75	375
900000	2780	14688	61	121	1089	1 B. & S.	258	1361	7	109	327
850000	2627	13872	61	118	1061	2 B. & S.	204	1079	7	98	294
800000	2472	13056	61	115	1034	3 B. & S.	162	855	7	87	261
750000	2318	12240	61	111	998	4 B. & S.	128	680	7	77	231
700000	2164	11424	61	107	963	5 B. & S.	102	538	7	69	207
650000	2010	10608	61	103	928	6 B. & S.	80	427	7	61.2	183
600000	1854	9792	61	99	891	8 B. & S.	51	268	7	48.4	145
550000	1700	8976	61	95	855	10 B. & S.	32	169	7	38.6	116
500000	1545	8160	37	116	812	12 B. & S.	20	106	7	30.6	91.8
450000	1390	73 <del>44</del>	37	110	770	14 B. & S.	13	67	7	24.2	72.6
400000	1236	6528	37	104	729	16 B. & S.	8	42	7	19.3	57.9
350000	1082	5712	37	97	679	18 B. & S.	5	26	7 .	15.1	45.3

Capacity				_	ls of Stranding			
Circular	4 6				Vhen Compose			
Mils	7 Wires	12 Wires	19 Wires	27 Wires	37 Wires	61 Wires	91 Wires	127 Wires
2000000 1750000 1500000 1250000 1000000	1 - #11.1 1 - 0	0		-		157 142 128	148 139 128 117 105	126 117 109 99 89
950000 900000 850000 800000 750000		ragus	11/0Z, 9	switten vily	143	125 121 118 115 111	102 100 97 94 91	86 84 82 79 77
70000 650000 600000 550000		2.00		No.	138 133 127 122	107 103 99 95	88 84 81 78	74 72 69 66
500000 450000 400000 350000 300000 250000			126 115	136 129 122 114 105 96	116 110 104 97 90 82	91 86 81 76 70 64	74 70 66 62 57.4 52.4	62 59 56 52 48 44
0 B. & S. 0 B. & S. 0 B. & S. 0 B. & S. 1 B. & S. 2 B. & S.	123 109 98	118 105 94 83 75	105 94 84 75 66 59.2	86 79 70 62.6 55.6 49.7	76 67 60 53.4 47.5 42.4	58.9 52.5 46.7 41.6 37	48.2 43 38.3 34.1 30.3 27.1	40 36 32 28 25 22
3 B. & S. 4 B. & S. 5 B. & S. 6 B. & S. 8 B. & S. 0 B. & S.	87 77 69 61.2 48.4 38.6	66 59 52.5 46.8 37 29.4	52.5 46.8 41.8 37.2 29.4 23.4	44.1 39.3 35 31.2 24.6 19.6	37.7 33.5 29.9 26.6 21.1 16.8	29.3 26.1 23.3 20.7 16.4 13.1	24 21.4 19.1 17 13.4 10.7	20 18 16 14 11 9
2 B. & S. 4 B. & S. 6 B. & S. 8 B. & S.	30.6 24.2 19.3 15.1	23.4 18.5 14.7 11.6	18.6 14.7 11.7 9.2	15.6 12.3 9.8 7.7	13.3 10.5 8.4 6.6	10.4 8.2 6.5 0.3	8.5 6.7 5.3	7 5 4 3

#### GALVANIZED WIRE



Telephone and Telegraph Wire

There are three grades of galvanized wire, classified as follows: Extra Best (E. B. B.), Best Best (B. B.) and Steel. Specify grade desired.

Extra Best Best (E. B. B.) wire is made from a special stock of great purity, producing wire of absolutely uniform quality, in which the elements of softness and elongation are combined with low electrical resistance to a marked degree. It is largely employed in long lines or service where low electrical resistance is both desirable and necessary.

Best Best (B. B.) wire is made from a stock of high quality, producing a wire somewhat less uniform and of higher resistance than E. B. B., but of greater tensile strength. This grade is used almost exclusively for the construction of subscribers' lines in exchanges, and on account of its great tensile strength is best

adapted for rural or farmer lines.

Steel wire has a greater tensile strength than either E. B. B. or B. B., but on account of its greater

electrical resistance is not very generally used.

The different grades of wire are Extra Galvanized, i.e., the wire is protected from atmospheric action by a heavy uniform coating of spelter.

List No. B. W. G. Gauge	B. W. G.	Diameter	Approximate	breaking strai	Weight in Lbs. per Mile	Bundles Mile	
	in Inches	E. B. B.	В. В.	Steel			
660810	4	.238	2028	2271	2433	811	1/4
660811	6	.203	1475	1652	1770	590	17
660812	8	.165	975	1092	1170	390	1%
660813	9	.148	785	879	942	314	3/2
660814	10	.134	645	722	774	258	1/2
660815	11	.120	515	577	618	206	1/2
660816	12	.109	425	476	510	170	1/4
660817	14	.083	247	277	297	99	1/3

Prices on application.

#### Standard Galvanized Steel Strand



Steel Strand

For guys, signal strand, trolley line span wire and other purposes. Composed of seven wires twisted

List No.	Diameter	Wgt. per 1000 Ft. in Lbs.	Approx. Breaking Strain in Lbs.	List Price per 100 Ft
660818 660819 660820 660821 660822 660823 660824 660825 660937 660938	/2-inch /4-inch /4-inch /4-inch /4-inch /4-inch /4-inch /4-inch /4-inch /4-inch	510 415 295 210 125 95 75 55 32	8,500 6,500 5,000 3,800 2,300 1,800 - 1,400 900 500	On Application

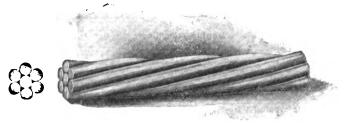
Intermediate sizes take next higher list.

Galvanized strand is furnished both single and double galvanized. In ordering, state which is required.

NOTE: Add 10% for double strand.

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#### GALVANIZED WIRE STRANDS



Galvanized Wire Strand

#### Uses of Strand

#### **Guy Strand**

Extra Galvanized Siemens-Martin Strand is frequently employed to guy electric railway, telegraph and telephone poles.

#### Messenger Strand

18-inch diameter extra galvanized Siemens-Martin Strand, %-inch or 18-inch diameter extra galvanized high strength strand is stretched from pole to pole, and from this messenger strand, so called, the heavy lead-encased telephone cable is suspended by means of clips, wire or cord at short intervals. A messenger strand thus sustains the stress due to weight of cable, wind or ice load. Common galvanized strand should never be used for this purpose, as it does not possess the requisite strength.

#### Catenary Method of Supporting Trolley Wires

One or more messenger strands are stretched from the center of the tracks. Every few feet along this messenger strand are pendent hangers that clamp on to the trolley wire, retaining it in a rigid, straight, horizontal line. For a single messenger strand carrying 4/0 Copper Trolley Wire, in spans of 125 to 150 feet, 3/s-inch or 1/8-inch diameter, extra galvanized Siemens-Martin Strand is frequently used. For longer spans, up to 225 feet, the 3/s-inch or 1/8-inch extra galvanized high strength strand is preferable.

#### Lightning Arrester for Transmission Lines

To protect high-tension current transmission lines from destructive lightning a %-inch diameter extra galvanized Siemens-Martin Strand, known as an "overhead ground strand," is strung at the highest point on the supporting towers, this "overhead ground strand" being connected at frequent intervals with the ground. The extra galvanized Siemens-Martin Strand, because of its great conductivity, is employed almost exclusively for the "overhead ground strand."

#### EXTRA GALVANIZED SIEMENS-MARTIN STRAND

	LAL	ica canno					
Diameter Inches	Tensile Strength in Pounds	Wgt. Lbs. per 1000 Ft.	*List Price "per 100 Ft.	Diameter Inches	Tensile Strength in Pounds	Wgt. Lbs. per 1000 Ft.	*List Price per 100 Ft.
5/8 1/2 1/6 8/8	19,000 11,000 9,000 6,800	800 510 415 295	On Application	# 1/4 1/6 1/6	4,380 3,050 2,000 900	160 125 75 32	On Application
18	4,860 EXT	210	ANIZED HI	'° GH STR	RENGTH STRA		
Diameter	Tensile Strength	Wgt. Lbs.	*List Price	Diameter	Tensile Strength	Wgt. Lbs.	List Price

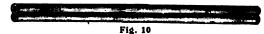
Diameter	Tensile Strength	Wgt. Lbs.	*List Price	Diameter	Tensile Strength	Wgt. Lbs.	*List Price
Inches	in Pounds	per 1000 Ft.	per 100 Ft.	Inches	in Pounds	per 1000 Ft.	per 100 Ft.
5/8	<b>25,00</b> 0	800		27	7,300	1 <b>60</b>	
1/2	18,000	510	On	1/4	5,100	125	On
7.	15,000	415	Application	16	3,300	75	Application
<b>8</b> ∕8 .	11,500	295	Application	1/8	1,500	32	мррисамон
14	8,100	210	i	, i			

#### EXTRA GALVANIZED EXTRA HIGH STRENGTH STRAND

Diameter	Tensile Strength	Wgt. Lbs.	*List Price	Diameter	Tensile Strength in Pounds	Wgt. Lbs.	*List Price
Inches	in Pounds	per 1000 Ft.	per 100 Ft.	Inches		per 1000 Ft.	per 100 Ft
5 6 1/2 1 6 3 6	42,000 27,000 22,500 17,250 12,100	800 510 415 295 210	On Application	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10,900 7,600 4,900 2,250	160 125 75 32	On Application

\*Delivery F. O. B. Factories, Trenton, N. J., Worcester, Mass., or Phillipsdale, R. I. For warehouse deliveries write nearest house.

#### COPPER CONNECTORS



Double Tube Sleeve



Fig. 11 Sleeve and Wire Welded Together in One Solid Piece

#### Western Electric—National Copper Connectors

#### For Splicing Copper Wire

The above connectors are of the double tube type, and are made accurately and very close to the size of the wire for which they are intended.

When twisted the sleeve is drawn snugly around the wire, forming an absolutely solid joint which air and moisture cannot penetrate. Fig. 11 shows sleeve sawed lengthwise after being twisted.

#### DOUBLE TUBE

Size Wire	Length Inches	Size Wire	Length Inches	Size Wire	Length Inches
4/0 B. & S.	20	8 B. & S.	51/2	12 B. & S.	41/2
3/0 B. & S.	18	8 B. W. G.	63/4	12 B. & S.	21/4
2/0 B. & S.	16	8 B. W. G.	33/8	14 B. W. G.	41/2
0 B. & S.	14	9 B. & S.	51/4	14 N. B. S.	41/2
1 B. & S.	12	10 B. & S.	43/4	14 N. B. S	21/4
2 B. & S.	91/2	10 B. & S.	28%	14 B. & S.	4
3 B. & S.	834	10 B. W. G.	51/2	14 B. & S.	2
4 B. & S.	8	10 N. B. S.	51/2	16 B. & S.	4
4 B. & S.	6	11 B. W. G.	51/4	16 B. & S.	2
6 B. & S.	6	12 B. W. G.	51/4	18 B. & S.	4
7 B. & S.	53/4	12 N. B. S.	43/	18 B. & S.	2
7½ B. & S.	51/2	12 N. B. S.	23%	19 B. & S.	11/2

Prices on application.

#### COMBINATION

Size Wire	Length Inches	Size Wire	Length Inches	Size Wire	Length Inches
8 B.W.G./12 N.B.S.	634	12 N.B.S./14 N. B. S.	23/8	14 N.B.S./16 B.&S.	4
8 B.W.G./12 N.B.S. 8 B.&S. /12 N.B.S.	$\frac{338}{512}$	12 N.B.S./14 B.&S. 12 N.B.S./14 B.&S.	43/4 23/8	14 N.B.S./16 B.&S. 14 N.B.S./17 B.&S.	4
8 B.&S. /12 N.B.S.	234	12 N.B.S./16 B.&S.	43/4	14 N.B.S./17 B.&S.	2
8 B.&S. /12 B.&S. 8 B.&S. /12 B.&S.	$\begin{bmatrix} 5\frac{1}{2} \\ 2\frac{3}{4} \end{bmatrix}$	12 N.B.S./16 B.&S. 12 N.B.S./17 B.&S.	$\frac{2\frac{3}{8}}{4\frac{3}{4}}$	14 N.B.S./18 B.&S. 14 N.B.S./18 B.&S.	4 9
9 B.&S. /14 B.&S.	51/4	12 N.B.S./17 B.&S.	23/8	14 B.&S. /17 B.&S.	4
9 B.&S. /14 B.&S.	25/8	12 N.B.S./18 B.&S.	43/4	14 B.&S. /17 B.&S.	2
9 B.&S. /16 B.&S. 9 B.&S. /16 B.&S.	514 25/8	12 N.B.S./18 B.&S. 14 N.B.S./14 B.&S.	23/8	17 B.&S. /18 B.&S. 17 B.&S. /18 B.&S.	2
12 N.B.S. /14 N.B.S.	434	14 N.B.S./14 B.&S.	2	18 B.&S. /19 B.&S.	11/2

Prices on application.

For split sleeves add \$2.50 per thousand to price of regular sleeves.

#### SINGLE TUBE

Size Wire	Length Inches	Size Wire	Length Inches	Size Wire	Length Inches
8 B. W. G.	63/4	12 N. B. S.	23/8	14 N. B. S	41/2
8 B. W. G.	33 8	12 B. & S.	41/2	14 N. B. S.	21/4
10 B. & S.	434	12 B. & S.	21/4		•

Prices on application.

#### Western Electric—National Double Tube Tinned Steel Sleeves

#### For Splicing Iron Wire

Size	Length		Size	Length	
Wire	Inches		Wire	Inches	
10 B. W. G.	51/2	Prices on	14 B. W. G.	41/2	Prices on
12 B. W. G.	51/4	Application	ł.		Application

\*Delivery F. O. B. Cleveland, O. For warehouse deliveries write nearest house.

# PORCELAIN KNOBS Split Knobs

#### NO. 51/2 SPLIT

List No.	Code	Height	Diam.	Groove	Hole
$5\frac{1}{2}$	Old	$1\frac{3}{4}$ ins.	1 in.	No. 12 B. & S.	1/4 in.
$5\frac{1}{2}$	New	13/4 ins.	$1\frac{1}{8}$ ins.	No. 12 B. & S.	1/4 in.

#### Package Data and List Price

Code	List No.	Std. Pkg.	Pkg. Wt.	List per 100	List per 1000
Old	51/2	3250	415 lbs.	<b>\$4</b> .00	\$34.00
New	51/6	3000	415 lbs.	4.25	36.00

#### NO. 1849 DESIGN

List No.	Height	Diam.	Groove	Hole
1849	17/8 ins.	$1\frac{1}{16}$ in.	No. 12 B. & S.	1/4 in.

#### Package Data and List Price

List No.	Std. Pkg.	Pkg. Wt.	List per 100	List per 1000
1849	3250	415 lbs.	\$1.15	\$35.00

#### NO. 551/2 SQUARE INTERCHANGEABLE

List No.	Height	Diam.	Groove	Hole
551/2	$1\frac{5}{8}$ ins.	$1\frac{1}{4}$ ins.	No. 12 B. & S.	1/4 in.

#### Package Data and List Price

List No.	8td. Pkg.	Pkg. Wt.	List per 100	List per 1000
551/2	2500 lbs.	410 lbs.	<b>\$</b> 5.00	<b>\$42.00</b>

#### NO. 5517 DESIGN

Following knobs are all of the same general design, differing only in dimensions.

List No.	Height	Diam.	Groove	Hole
5517	13/4 ins.	1¼ in. x 👭 in.	No. 12 B. & S.	1/4 in.
5135	1 % ins.	13% ins.	No. 8 B. & S.	₩ in.
5147	2¼ ins.	1 1/2 ins.	No. 4 B. & S.	🚣 in.

#### Package Data and List Price

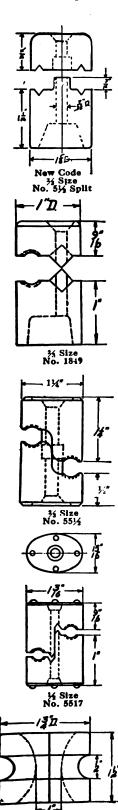
List No.	Std. Pkg.	Pkg. Wt.	List per 100	List per 1000
5517	3750	465 lbs.	\$5.00	\$42.00
5135	1500	415 lbs.	7.70	68.00
5147	900	<b>4</b> 30 lbs.	7.00	62.00

#### NO. 37 SPLIT

List No.	Height	Diam.	Groove	Hole
37	11/2 ins.	134 ins.	$\frac{1}{2}$ in.	½ in.

#### Package Data and List Price

List No.	Std. Pkg.	Pkg. Wt.	List per 100	List per 1000
37	1500	370 lbs.tize	d by <b>\$7.70</b> Q	\$68.00
	2	9	0	Insulators



37 Split

Hole

🔥 in.

#### PORCELAIN KNOBS

#### SPLIT KNOBS

#### No. 101 Design

List No.	Height	Diam.	Groove	Hole
101	$1\frac{3}{4}$ ins.	$1\frac{1}{16}$ ins.	1/4 in.	1/4 in.

#### Package Data and List Price

List	Std.	Wgt.	List	List Price
No.	Pkg.	per Bbl.	per 100	per 1000
101	<b>370</b> 0	510 lbs.	<b>\$</b> 4.50	\$37.00

#### Midget Reversible

List No.	Height	Diam.		Hole
Midget } Reversible }	13/4 ins.	$1\frac{1}{8}$ ins.	1⁄4 in.	1/4 in.

#### Package Data and List Price

List	Std.	Wgt.	List	List Price
No.	Pkg.	per Bbl.	per 100	per 1000
Midget } Reversible }	4000	£00 lbs.	\$4.50	\$37.00

#### No. 9419 Midget

#### New Code

List No.	Height	Diam.		Hole
9419 Midget New Code	1 11 ins.	1¼ ins.	⅓ in.	1/4 in.

#### Package Data and List Price

List	Std.	Std. Pkg.	List	List Price
No.	Pkg.	Gross Wgt.	per 100	per 1000
9419 Midget New Code	5000	500 lbs.	\$4.40	\$36.00

#### No. 9420 Design Diam.

2 ins.

15 in.

Height

 $2\frac{1}{8}$  ins.

2-B

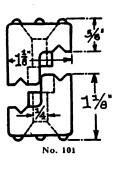
Package Data and List Price					
List	Std.	Wgt.	List	List Price	
No.	Pkg.	per Bbl.	Each	<b>per 10</b> 0	
9420	875	430 lbs.	\$0.10	\$7.50	

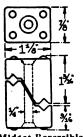
#### Detroit Design

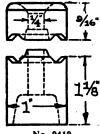
List No.	Height	Di <b>am.</b>		Hole
Detroit	$1\frac{7}{8}$ ins.	11/4 ins.	1/4 in.	1/4 in.

#### Package Data and List Price

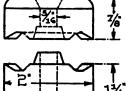
List	Std.	Std. Pkg.	List	List Price
No.	Pkg.	Gross Wgt.	per 100 T	per 1000
Detroit	3000	450 lbsDigitized	d by <b>(\$5.06</b> ] [C	<b>\$42.0</b> 0





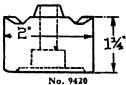


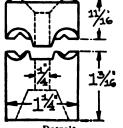
No. 9419 Midget New Code



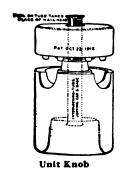
List No.

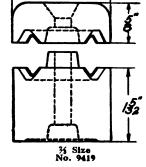
9420

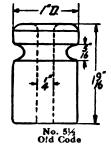


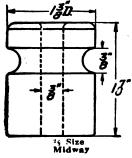


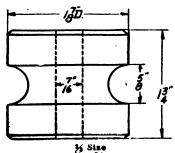
I Insulators











# PORCELAIN KNOBS Split Knobs

#### UNIT SPLIT KNOB

A complete knob with top and bottom always together, held by a metal tube which is furled at either end and takes the place of nail heads.

List	•	Std.	Pkg.	List	List
No.	Description	Pkg.	Wť.	per 100	per 1000
1	For No. 12 wire and smaller	4000	500 lbs.	\$5.00	\$42.00
2	For No. 10, 8 or 6 wire	4000	500 lbs.	10.50	88.00
	Height, 13/2 inches. Diameter	er. 11/2	inches.	Hole, 1/4	inch.

#### Standard Knobs

#### NO. 9419

List No.	Height	Diam.	Groove	Hole
9419	13/4 ins.	11/2 ins.	1/4 in.	1/4 in.

#### Package Data and List Price

List No.	Std. Pkg.	Pkg. Wt.	List per 100	List per 1000
9419	1500	415 lbs.	<b>\$</b> 4.25	<b>\$</b> 36.00

#### NO. 51/2 DESIGN

Following knobs are all of the same general design, differing only in dimensions.

List No.	Code	Height	Diam.	Groove	I!ole
51/2	Old	1 👫 ins.	1 in.	🛧 in.	1/4 in.
$5\frac{1}{2}$	New	1¾ ins.	11/g ins.	🚡 in.	⅓ in.
5		1¼ ins.	l in.	👫 in.	3/4 in.

#### Package Data and List Price

List No.	Code	Std. Pkg.	Pkg. Wt.	List per 100	List per 1000
51/2	Old	4500	400 lbs.	\$2.10	\$15.60
51/2	New	<b>3</b> 500	410 lbs.	2.50	<b>19.50</b>
5		6000	430 lbs.	2.10	15.60

#### MIDWAY DESIGN

Following knobs are all of the same general design, differing only in dimensions.

List No.	Height	Diam.	Groove	Hole
Midway	17/8 ins.	$1\frac{3}{8}$ ins.	3∕8 in.	% in.
4	1 <del>11</del> ins.	1½ ins.	3∕8 in.	⅓ in.
41/2	1 1/2 ins.	1½ ins.	76 in.	⅓ in.
10	1¾ ins.	1 5/8 ins.	⅓ in.	⅓ in.
10 ነራ	1 % ins.	11/6 ins. '	¾ in.	% in.

#### Package Data and List Price

List No.	Std. Pkg.	Pkg. Wt.	List per 100	List per 1000
Midway	2000	390 lbs.	<b>\$</b> 3.25	\$27.20
4	1900	415 lbs.	3.25	27.20
41/2	1700	410 lbs.	3.60	30.40
10	1500	400 lbs.	4.20	36.40
101/6	1500	415 lbs.	4.20	<b>36.40</b>

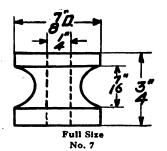
#### NO. 24 DESIGN

Following knobs are all of the same general design, differing only in dimensions.

List No.	Height	Diam.	Groove	Hole
24	13/4 ins.	1 1/2 ins. 2 1/4 ins.	5∕8 in.	in.
26	2 ins.	21/4 ins.	👬 in.	⅓ in.

#### \* Package Data and List Price

List No.	Std. Pkg.	Pkg. Wt.	List per 100	List per 1000
24	1200	425 lbs.	<b>\$</b> 6.5 <b>0</b>	<b>\$</b> 58.80
			List each	List per 100
26	700	<b>420'lbe.</b> igitiz	List each ed by \$0.27	LC \$10.50
	3		O	Insulators



#### PORCELAIN KNOBS

#### NO. 7 DESIGN

Following knobs are all of the same general design, differing only in dimensions:

List No.	Heigh <b>t</b>	Diam.	Groove	Hole
7	3/4 in.	<b>⅓</b> in.	√ in.	1/4 in.
6	₹ in.	H in.	i in.	Ä in.
8	₩ in.	1 in.	👫 in.	¼ in.
14	¾ in.	<b>⅓</b> in.	🚠 in.	in.

#### Package Data and List Price

List No.	Std. Pkg.	Pkg. Wt.	List per 100	List per 1000
7	15000	370 lbs.	<b>\$</b> 3.20	<b>\$2</b> 6.60
6	13500	465 lbs.	<b>2</b> .65	21.00
8	8000	375 lbs.	<b>2.65</b>	21.00
14	12500	450 lbs.	2.65	21.00

#### NO. 11 DESIGN

Following knobs are all of the same general design, differing only in dimensions:

List No.	Height	Diam.	Groove	Hole
11	<del>11</del> in.	1½ ins.	⅓ in.	1/4 in.
12	₩ in.	13/8 ins.	💏 in.	₩ in.
13	¾ in.	$1\frac{1}{16}$ ins.	5∕8 in.	⅓ in.
45	<b>%</b> in.	1½ ins.	🔥 in.	₩ in.
46	1 in.	1¼ ins.	🔥 in.	👬 in.

#### Package Data and List Price

List No.	Std. Pkg.	Pkg. Wt.	List per 100	List per 1000
11	10000	330 lbs.	\$3.35	\$28.00
12	5000	275 lbs.	3.65	30.80
13	4500	300 lbs.	3.65	30.80
45	5000	300 lbs.	3.65	30.80
46	4500	350 lbs.	4.20	<b>36.40</b>

N	O.	Z

List No.	Height	Diam.	Groove	Hole
2	2 ins.	2 ins.	⅓ in.	⅓ in.

#### Package Data and List Price

List No. 2	Std. Pkg.	Pkg. Wt.	List each	List per 100
	850	425 lbs.	\$0.74	\$6.86
Price	s on application	on.		

#### NO. 3 WG

List No.	Height	Diam.	Groo <b>ve</b>	Hole
3 WG	13/4 ins.	2 ins.	¾ in.	👬 in.

#### Package Data and List Price

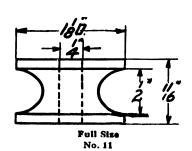
List No.	Std. Pkg.	Pkg. Wt.	List each	List per 100
3 WG	1000	390 lbs.	<b>\$</b> 0.63	<b>\$</b> 5.7 <b>4</b>
Prices	on application.			

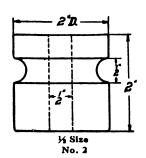
#### NO. 22

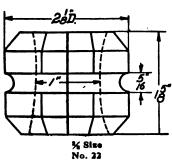
List No.	Height	Diam.	Groove	Hole
22	15% ins.	21/8 ins.	👬 in.	1 in.

#### Package Data and List Price

		-0	
List No.	Std. Pkg.	Pkg. Wt. List each	List per 100
22	1000	Pkg. Wt. List each 400 lbal by \$0.80	<b>\$</b> 7.42







# 26D 3 14 Size No. 1

#### esieiii Eieciiic

#### PORCELÁIN KNOBS

NO.	1
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List No.	Height	Diam.	Groove	Hole
1	3 ins.	2½ ins.	¾ in.	👬 in.

#### Package Data and List Price

List No.	Std. Pkg.	Pkg. Wt.	List Each	List per 100
1	600	420 lbs.	<b>\$</b> 0.18	<b>\$</b> 12.32

#### NO. 31/2 DESIGN

Following knobs are all of the same general design, differing only in dimensions:

List No.	Height	Diam.	Groove	Hole
31/2	2 ins.	2 ins.	7 in. 7 in.	₁% in. ₁% in.
3	1¾ ins.	2 ins.	7 in.	16 in.

#### Package Data and List Price

List No.	Std. Pkg.	Pkg. Wt.	List Each	List per 100
31/2	900	435 lbs.	\$0.74	\$6.86
3	1000	430 lbs.	.63	5.74

#### NO. 25 DESIGN

Following knobs are all of the same general design, differing only in dimensions:

List No.	Height	Diam.	Groove	Hole
25	1½ ins.	2½ ins.	1 1/2 ins. 1 1/4 ins.	₩ in.
29	$2\frac{1}{4}$ ins.	$2\frac{1}{2}$ ins.	1¼ ins.	in.
49	1½ ins.	$2\frac{1}{4}$ ins.	<b>⅓</b> in.`	🔏 in.

#### Package Data and List Price

List No.	Std. Pkg.	Pkg. Wt.	List Each	List per 100
25	750	330 lbs.	\$1.40	\$10.50
29	500	400 lbs.	1.65	13.00
49	700	425 lbs.	1.35	10.22

#### NO. 53 DESIGN

Following knobs are all of the same general design, differing only in dimensions:

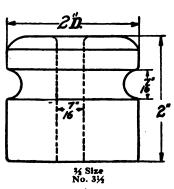
List No.	Height	Diam.	Groove	Hole
53	2% ins.	4½ ins.	1 % ins.	% in.
54	3¼ ins.	4½ ins.	2% ins.	% in.

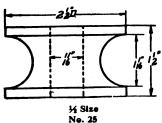
#### Package Data and List Price

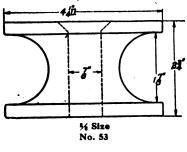
List No.	Std. Pkg.	Pkg. Wt.	List Lach	List per 100
53	130	275 lbs.	<b>\$</b> 0.65	\$52.00
54	125	250 lbs.	.80	65.00
		NO. 0		
List No.	Height	Diam.	Groove	Hole
0	21/4 ins.	3 ins.	1 in.	11/4 ins.

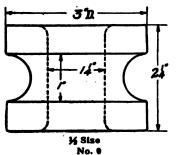
#### Package Data and List Price

List No.	Std. Pkg.	Pkg. Wt. List Each List per 100 \$18.78
0	350	350 lbs. \$2.10 \$18.78
	S.	Immilatora

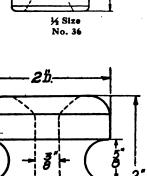






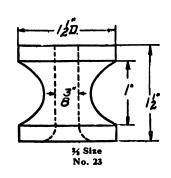


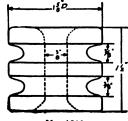
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¾ Size No. 20





No. 6061 Insulators

#### PORCELAIN KNOBS

NO. 36

 List No.
 Height
 Diam.
 Groove
 Hole

 36
 13/4 ins.
 13/4 ins.
 3/4 ins.
 1/2 in.

#### Package Data and List Price

 List No.
 Std. Pkg.
 Pkg. Wt.
 List per 100
 List per 1000

 36
 1500
 415 lbs.
 \$5.00
 \$43.20

NO. 20

List No. Height Diam, Groove Hole 20 2 ins. 2 ins. % in. % in.

#### Package Data and List Price

List No. Std. Pkg. Pkg. Wt. List Price Each List per 100 20 1000 440 lbs. \$0.74 \$6.86

#### NO. 15 DESIGN

Following knobs are all of the same general design, differing only in dimensions:

List No.	Height	Diam.	Groove	Hole
15	1 👫 ins.	13/4 ins.	⅓ in.	📆 in.
41	1¼ ins.	2 ins.	1/2 in.	% in.
47	1 1/4 ins.	13/4 ins.	7 in.	💤 in.
48	11/2 ins.	21/2 ins.	% in	% in.

#### Package Data and List Price

Pkg. Wt. List No. 8td. Pkg. List per 100 List per 1006 415 lbs. \$4.85 \$41.60 15 1900 41 1300 400 lbs. 6.40 57.20 47 1400 340 lbs. 4.85 41.60 List Each List per 100 List No. Std. Pkg. Pkg. Wt. 48 850 450 lbs. \$0.25 10.22

NO. 23

List No. Height Diam. Groove Hole 23 1½ ins. 1½ ins. 1 in. ¾ in.

#### Package Data and List Price

List No. Std Pkg. Pkg. Wt. List per 100 List per 1000 23 2000 250 lbs. \$4.40 \$37.70

#### **TELEPHONE KNOBS**

Approx. Wgt. List Std. Height Groove Hole Diam. Pkg. 6061 Two groove  $1\frac{5}{8}$  ins.  $1\frac{7}{16}$  ins.  $\frac{4}{16}$  in.  $\frac{3}{8}$  in. 2000 455 lbs. List per 100 List per 1000 List Each \$56.00 List No.6061.....\$0.15 \$6.30 6062 Four groove  $1\frac{3}{4}$  ins.  $2\frac{1}{4}$  ins.  $\frac{2}{16}$  in.  $\frac{7}{16}$  in. 1000 375 lha. List No. 6062. Digitized by List per 1000 56.00

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#### PORCELAIN TUBES Standard Unglazed Porcelain Tubes



Tube list dimensions conform to the new rules of the Underwriters' Board. Barrel lots constitute a standard package.

Mfr's. Standard List Price per 100. Special Discounts on Application

Length			1/2 Hole,	5/8 Hole,	3/4 Hole,	1 Hole,	1 1/4 Hole,	1 ½ Hole,	13/4 Hole,	2 Hole,	21/4 Hole,	2½Hole,
in			H Out-		1 de Out-							3 HOut-
Inches	side	_side	side	side	side	side	side	side	_side	side	side	side
Under	Diam-	Dam-	Diam-	Diam-	Diam-	Diam-	Diam-	Diam-	Diam-	Diam-	Diam-	Diam-
Head	eter	eter	eter	eter	eter	eter	eter	eter	eter	eter	eter	et <b>er</b>
1/2	\$1.30	\$1.40										
1	1.30	1.40	\$2.10	\$2.70	<b>\$</b> 3.00	<b>\$</b> 4.50						
11/2	1.30	1.50	2.10	2.70	3.30	5.30						
2	1.40	1.80	2.60	3.20	4.20	6.00						
21/2	1.50	2.20	3.00	4.00	5.00	7.00	\$12.20	\$15.60	<b>\$</b> 19.80	\$23.40	\$26.80	\$30.30
3	1.60	2.60	3.40	4.70	5.50	8.00	13.80	17.40	22.00	25.80	29.60	32.50
4	2.70	3.00	4.10	5.50	6.80	10.00	15.60	19.20	23.90	27.70	31.50	35.30
5	3.20	3.60	4.80	6.40	8.00	12.50	18.10	25.30	31.10	41.70	48.80	56.80
6	3.90	4.50	5.50	7.30	9.50	14.30	19.20	31.20	45.30	57.90	70.50	83.20
8	7.20	8.40	9.60	10.80	12.00	16.80	<b>24</b> .00	38.40	58.10	73.90	89.80	105.60
10	9.60	10.80	12.00	14.40	16.80	19.20	31.20	45.60	66.00	81.80	97.70	113.50
12	14.40		16.80	19.20	21.60	<b>2</b> 6.40	45.60	69.20	102.10	128.00	154.00	180.00
14	20.20	23.10	<b>2</b> 5.90	28.80	31.70	<b>34</b> .60	63.40	97.90	145.70	183.70	221.80	259.80
16	23.10		<b>2</b> 8.80	34.60	37.50	43.20	74.90	109.50	158.40	196.50	231.50	272.40
18	25.90	28.80	31.60	40.30	43.20	49.00	86.40	122.70	190.30	234.10	277.70	321.10
20	28.80	31.70	37.50	43.20	46.10	54.70	95.10	135.40	211.40	259.20	307.60	355.90
22	33.10	35.00	40.30	46.10	51.90	59.10	103.70	148.30	321.60	285.10	338.70	392.30
24	37.50	40.30	43.20	49.00	57.60	63.40	112.30	161.30	252.30	311.10	369.90	428.50

For glazed tubes, add 50 per cent. to list prices.

For split regular tubes, multiply list by ten (10).

For floor tubes, multiply list by six (6).

For split floor tubes, multiply list by ten (10).

For headless tubes, multiply list by four (4).

Curved and curved end tubes, multiply list by six (6).

Crossover tubes split, multiply list by ten (10). Crossover tubes solid, multiply list by eight (8).

Norg.—In computing prices on split floor tubes, headless tubes, curved and curved and tubes, the above list prices and lengths must be used as referring to "OVER-ALL" lengths, and not lengths under head.

Split regular tubes lengths refer to under head.

Crossover, solid and split tubes lengths refer to between heads.

#### SPECIAL PACKAGES Standard Porcelain, Packed in Corrugated Paper Boxes

8

Special attention is called to the method of packing Standard Porcelain in heavy corrugated paper cartons. This method entirely eliminates the breakage incident to the usual barrel packages. Packing in cartons is done by hand, which insures inspection of every piece and the selection of only perfect material; this fact easily compensates for the slightly increased cost over the usual barrel packages.

#### Packed 100 in a Carton

Material	Over-all Dimension of Carton
🛧 x 3 inch Tubes	8 x 8 x 4 inches
🚡 x 4 inch Tubes .	$8 \times 8 \times 5$ inches
% x 3 inch Tubes	7 x 6 x 7 inches
5½ Split Knobs	9 x 8 x 5 inches
2-wire Cleats	9 x 8 x 5 inches
3/8 x 4 inch Tubes	9 x 8 x 6 inches

#### Packed 500 in a Carton

I acked 300 iii a	Carton
A x 3 inch Tubes	8 x 10 x 12 inches
x 4 inch Tubes	10 x 10 x 12 inches
🗽 🛪 3 inch Tubes	8 x 10 x 16½ inches
3% x 4 inch Tubes	$10 \times 10 \times 16 \frac{1}{2}$ inches
5½ Split Knobs	10 x 10 x 14 inches
2-wire Cleats	10 x 10 x 16 <sup>1</sup> / <sub>2</sub> inches



#### PORCELAIN TUBES AND BUSHINGS

#### Standard Package, Quantity and Weight of Standard Porcelain Tubes

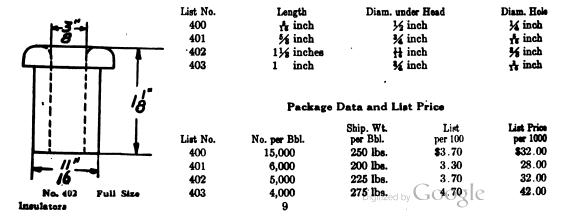
Approximate number of tubes per barrel and approximate shipping weight per bbl.

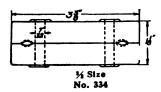
Note: Quantity given per bbl. Weight given per bbl.

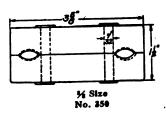
	Length Inches	I. D.	I. D. 3/8	I. D.	I. D. 5/8	I. D.	I. D. 1	I. D. 11/4	I. D. 11/2	I. D. 13/4
Quantity	1/2 1/2	15,000	12,500							
Weight		360	370		4 500	0.700			ł	1
Quantity Weight	1	11,000 370	7,500	6,000	4,500	3,700		1	1	İ
Quantity	11/2	9.000	380 6,000	375 4.200	380 3,200	330 2,500	1.500		ŀ	1
Weight	11/2	350	300	345	3,200 375	320	360		i	l
Quantity	2	6.500	5,000	3.400	2,500	1,800	1,100	'	l	
Weight	2	310	355	315	355	310	345		ł	1
Quantity	21/2	5.500	3.750	2.800	2,000	1.500	900	525	350	250
Weight	21/2	310	310	315	325	295	330	320	325	380
Quantity	3 2	4.500	3.000	2,000	1.500	1.100	750	425	300	225
Weight	3	280	315	235	265	280	315	310	315	370
Quantity	4	3,000	2,200	1.600	1,200	900	600	300	250	200
Weight	4	240	265	245	350	255	245	230	225	240
Quantity	5	2,500	1,700	1,250	1,000	800	400	285	240	175
Weight	5	235	255	245	245	265	265	250	235	255
Quantity	6	2,000	1,400	1,000	850	575	300	275	225	150
Weight.	6	225	245	235	240	235	235	260	245	270
Quantity	8	2,350	1,600	1,050	1,000	650	500	225	190	200
Weight	8	355	385	390	340	370	405	275	290	295
Quantity	10	1,850	1,300	900	800	550	400	180	150	140
Weight	10	350	345	360	350	385	400	290	280	255
Quantity	12	1,500	1,000	750	650	500	275	150	125	120
Weight	12	335	355	345	355	335	330	265	285	280
Quantity Weight	14 14	1,100 310	850 315	600 320	500	300 305	225	120 270	100 295	90
Quantity	16	1.000	650	320 500	340	305 275	315 175	90	295 75	290
Weight	16	315	395	300 335	450 335	385	315	245	250	250
Quantity	18	900	500	300	200	150	100	75	60	50
Weight	18	320	290	280	265	240	250	235	225	290
Quantity	20	750	500	350	200	190	100	235 75	60	50
Weight	20	315	305	325	280	255	285	260	255	310
Quantity	22	600	450	300	200	150	100	75	60	50
Weight	22	325	320	320	300	305	315	295	290	335
Quantity	24	600	500	300	200	150	100	75	60	50
Weight	24	340	330	305	325	335	380	310	305	360

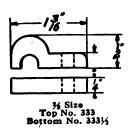
NOTE: Tubes of larger size than 1% x 24 are usually sold in less than barrel lots, therefore they are not given in this list.

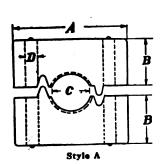
#### Porcelain Bushings

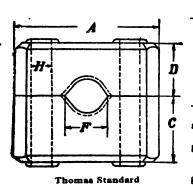












#### PORCELAIN CLEATS Two and Three Wire Cleats

NO. 334 CLEAT

DIMENSIONS: Length,  $3\frac{3}{8}$  inches; Height,  $1\frac{1}{8}$  inches; Width,  $\frac{1}{8}$  inch; Groove,  $\frac{3}{16}$  inch; Screw Hole,  $\frac{7}{12}$  inch.

List No.	Description	No. per Bbl.	Shpg. Wgt. per Bbl.	List per 100	List Price per 1000
334 334 334 334	Unglazed, two wire Glazed, two wire Unglazed, three wire Glazed, three wire	1850 1850 1850 1850	395 lbs. 395 lbs. 395 lbs. 395 lbs.	\$3.16 5.04 3.16 5.04	41.60 26.00

#### NO. 350 CLEAT

DIMENSIONS: Length, 3% inches; Height, 11/2 inches; Width, 1/2 inch; Groove, 1/2 inch; Screw Hole, 1/3 inch.

List No.	Description	No. per Bbl.	Shpg. Wgt. per Bbl.		List Price per 1000
350 350 350 350	Unglazed, two wire Glazed, two wire Unglazed, three wire Glazed, three wire	1250 1250 1250 1250	395 lbs. 395 lbs. 395 lbs. 395 lbs.	\$6.00 7.50 6.00 7.50	68.70 53.30

## Single Wire Cleats NO. 333 TELEPHONE CLEAT

(Bottom No. 3331/2)

DIMENSIONS: Length, 1 inches; Width, ½ inch; Groove, ¼ inch; Screw Hole, inch; Height: Top, ½ inch; Bottom, ¼ inch.

List No.	Description	Bbl.	Shpg. Wgt. per Bbl.	per 100	per 1000
333	Top, Glazed	21500	465 lbs.	\$2.02	\$17.00
333½	Bottom, Glazed	22000	475 lbs.	1.82	15.30

#### \*B. & D.—STYLE A

List No.		Dime	nsions		No.	Wgt.	List Price
IMBE IVO.	A	В	C	D	per Bbl.	per Bbl.	per 100
1 11/2 2 21/2 3 31/2 4	1 14 " 2 1/4" 2 1/4" 2 1/4" 3 1/8" 3 1/8" 3 3/8"	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	14" 88" 58" 114" 114"	16 " 16 " 16 " 16 " 16 " 16 " 16 " 16 "	1800 1250 1175 750 500 450 350	415 lbs. 415 lbs. 415 lbs. 490 lbs. 440 lbs. 440 lbs.	\$7.26 10.10 12.12 14.54 15.40 19.56 25.92

\*Glazed unless otherwise specified.

#### THOMAS STANDARD One Wire Cleats

Length   Width   Groove   per   Bbl.   Base   1" Base & To	<b></b>								
329 2½" 1" 36" 1200 450 12.96 16.40 11.3 330 2½" 1" 1½" 1200 435 15.36 19.44 16.3 331 2½" 1½" ½" 600 410 19.44 23.32 14.3		Length	Width	Groove	per		Code Base 1" Base & Top		
332 4" 1½" 1½" 300 420 9. 33214 4" 1½" 1½" 250 410 11.6	329 330 331 331½ 332 332¼	2½" 2½" 2½" 2½" 4" 4"	1" 1" 1¼" 1¼" 1½" 1½"	14" 15%" 15%"	1200 1200 600 600 300 250	450 435 410 400 420 410	12.96 16.40 11.72 15.36 19.44 16.20		

On the above cleats given under heading "Old Code Base" these

are less than 1-inch base.

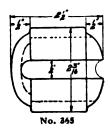
Those given under "A" are 1-inch base and are regular top, the

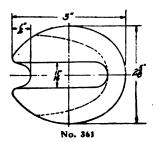
groove being 1 inch from bottom of base.

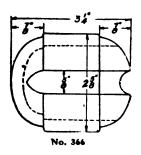
Those given under "B" are 1-inch base and 1-inch top.

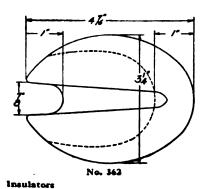
Nos. 332, 3321/4 and 3321/2 are the same in every respect except groove. Digitized by Google

# 3½° No. 324









### PORCELAIN INSULATORS

#### One Wire Cleat

NO. 324 CLEAT

DIMENSIONS: Length, 3½ inches; height, 2 inches over all; width, 1¼ inches; screw hole, ¾ x ¾ inch; groove, ¾ inch.

`List No.		No. per Bbl.	Shpg. Wgt. per Bbl.	List Each	List Price per 100
324	Cleat	800	400 lbs.	\$0.30	\$12.32

#### Strain Insulators

NO. 365

DIMENSIONS: Diameter, 2 4 inches; height, 2½ inches; groove, ½ inch.

List No.		No. per Bbl.	Shpg. Wgt. per Bbl.	List Each	List Price per 100
365	Strain insulator	500	500 lbs.	\$0.47	\$31.50

#### NO. 361

DIMENSIONS: Diameter, 2% inches; height, 3 inches; groove

List No.			per Bbl.		
361	Strain insulator	350	350 lbs.	<b>\$</b> 0.6 <b>5</b>	\$47.38

#### NO. 366

DIMENSIONS: Diameter, 2¾ inches; height, 3¼ inches; groove, 3% inch.

List No.		No. per Bbl.	Shpg. Wgt. per Bbl.	List Each	List Price per 100
	Strain insulator		420 lbs.		•

#### NO. 362

DIMENSIONS: Diameter,  $3\frac{1}{16}$  inches; height,  $4\frac{1}{16}$  inches; groove,  $\frac{1}{16}$  inch.

List No.	•		Shpg. Wgt. per Bbl.		
362	Strain insulator.	• Digitized by	425 lba.	12.75	\$126.00

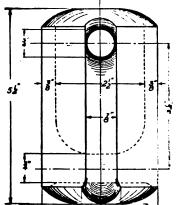
Ult.

#### PORCELAIN INSULATORS

#### Improved Strain Insulator

The improved porcelain strain insulator has protected end coverings. The wires passing through instead of around the insulator makes it impossible for the ends of the span or dry wires to come in contact with each other or allow any chance for leakage of current.

#### Test and Weight Data

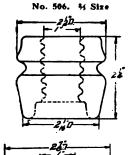


Weights	per 100	Flashover V		Strength	Quantity
Net	Gross	Dry	Wet	in Lbs.	per Bbl.
22 lbs.	25 lbs.	16000	9000	4000	1800
110 lbs.	120 lbs.	23000	14000	11000	400
160 lbs.	175 lbs.	25000	15000	19000	250
225 lbs.	255 lbs.	31000	20000	45000	150
150 lbs.	165 lbs.	19000	8000	19000	<b>3</b> C0
	Net 22 lbs. 110 lbs. 160 lbs. 225 lbs.	22 lbs. 25 lbs. 110 lbs. 120 lbs. 160 lbs. 175 lbs. 225 lbs. 255 lbs.	Net         Gross         Dry           22 lbs.         25 lbs.         16000           110 lbs.         120 lbs.         23000           160 lbs.         175 lbs.         25000           225 lbs.         255 lbs.         31000	Net         Gross         Dry         Wet           22 lbs.         25 lbs.         16000         9000           110 lbs.         120 lbs.         23000         14000           160 lbs.         175 lbs.         25000         15000           225 lbs.         255 lbs.         31000         20000	Net         Gross         Dry         Wet         in Lbs.           22 lbs.         25 lbs.         16000         9000         4000           110 lbs.         120 lbs.         23000         14000         11000           160 lbs.         175 lbs.         25000         15000         19000           225 lbs.         255 lbs.         31000         20000         45000

#### Dimensions and List Price

List No.		Height	Diam.	Hole	List Each	List Price per 100
500	Telephone wire insulator.		11/2			\$21.60
	Guy wire insulator			% in.		33.03 40.50
506	Guy wire insulator	$.5\frac{1}{2}$	338	¾ in.	.85	72.00
<b>50</b> }	Guy wire insulator	. 41/2	31/4	½ in.	.70	<b>54</b> .00

# Pony Duplex Insulators NO. 364



List No. 364	Height 21/4 in.	Diam. 2½ in.	Groove	Pin Hole 1 in. std.

## List Ne.

Packa	ge Data and List F	rice	
•	-	List	List Price
Std. Pkg.	Wt. per 100	Each	per 100
350	$72\frac{1}{2}$ lbs.	<b>\$</b> 0.15	<b>\$</b> 9. <b>00</b>



NO. 363

List	No.
30	8 <b>3</b>

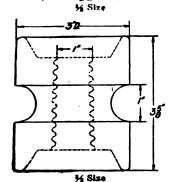
Height	Diam.	Groove	Pin Hole
2½ in.	21% in.	5% in.	1 in. std.



#### Package Data and List Price

List	No.
30	63

		List	List Price
Std. Pkg.	Wt. per 100	Each	per 100
250	1071/2 lbs.	\$0.18	\$10.80



2'0

#### Mine Insulator

#### INO. 367

List	No.
30	37

List No.

367

Height	Diam.	Groove	Pin Hole
35% in.	3 in.	1 in.	1 in. std.

Each [80.35]

#### Package Data and List Price

Std. Pkg.	Wt. per 100
200	155 libstized by

12

List Price
per 100
\$21.60

Insulators

#### PORCELAIN INSULATORS

#### Insulator No. 1011

#### FOR TELEPHONE AND TELEGRAPH SERVICE

#### Brown Glaze Furnished Unless Otherwise Specified

#### Package Data and List Price

List	Weight per 1000	Wt. packed	Quantity	List Price
No.		per 1000	per Bbl.	per 100
1011	730 lbs.	870 lbs.	400	\$12.96

#### Insulator No. 1012

#### FOR TELEPHONE AND TELEGRAPH SERVICE

#### Brown Glaze Furnished Unless Otherwise Specified

#### Package Data and List Price

List No.		Weight [per 1000	Wt. packed per 1000	Quantity per Bbl.	List Price per 100
1012	1	540 lbs.	640 lbs.	<i>5</i> 00	\$12.96

#### Insulator No. 1101

#### LINE VOLTAGE 5000

#### Brown Glaze Furnished Unless Otherwise Specified

#### Package Data and List Price

List	Weight per 1000	Wt. packed	Quantity	List Price
No.		per 1000	per Bbl.	per 100
1101	1200 lbs.	1380 lbs.	400	\$21.06

#### Insulator No. 1111

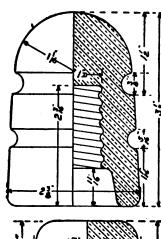
#### LINE VOLTAGE 5000

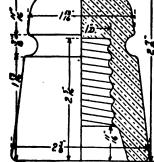
#### Brown Glaze Furnished Unless Otherwise Specified

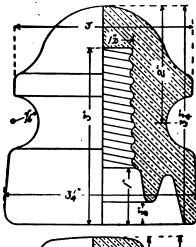
#### Package Data and List Price

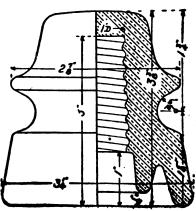
Li <b>st</b>	Weight	Wt. packed	Quantity	List Price
No.	per 1000	per 1000	per Bbl.	per 100
1111	1000 lbs.	1130 lbs.	300	\$17.82

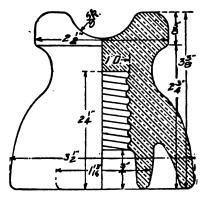
Delivery F. O. B. Factory, East Liverpool and Lisbon, Ohio. For warehouse deliveries write nearest house.

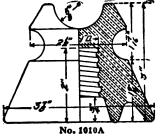


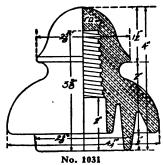


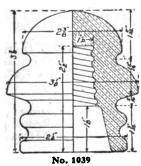


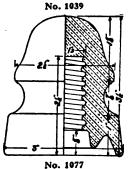












#### PORCELAIN INSULATORS

Brown Glazed Furnished Unless Otherwise Specified

#### Insulator No. 1049

#### LINE VOLTAGE 5500

#### Package Data and List Price

List	Weight per 100	Wt. packed	Quantity	List Price
No.		per 100	per Bbl.	per 100
1049	110 lbs.	135 lbs.	250	\$22.88

#### Voltage Data

Flashover in	Volta	Leakage	Arcing
Dry	Rain	Distance	Distance
43000	21000	4¾ ins.	1¾ ins.

#### Insulator No. 1010A

#### LINE VOLTAGE 6600

#### Package Data and List Price

		Weight		List
List	Weight	Packed	Quantity	Price
No.	per 100	per 100	per Barrel	per 100
1010A	100	130	250	<b>\$22.8</b> 8

#### Voltage Data

	Flashover in Voits	Leakage	Arcing
Dry	Rain	Distance	Distance
54000	24000	4 ins.	13/4 ins.

#### Insulator No. 1031

#### **LINE VOLTAGE 1000**

		Weight		List
List	Weight	Packed	Quantity	Price
No.	per 100	per 100	per Barrel	per 100
1031	155	195	175	<b>\$52.26</b>

#### Voltage Data

	Flashover in Volts	Leakage	Arcing
Dry	Rain	Distance	Distance
51000	25000	6¾ ins.	2½ ins.

#### Insulator No. 1039

		Weight		· List
List	Weight	Packed	Quantity	Price
No.	per 100	per 100	per Barrel	per 100
1039	125	165	200	\$27.96

#### Insulator No. 1077

#### **LINE VOLTAGE 5000**

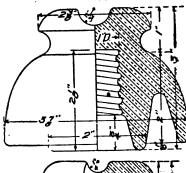
		Weight		List
List	Weight	Packed	Quantity	Price
No.	per 100	per 100	per Barrel.	per 100
1077	86	100	<b>3</b> 50	\$17.82

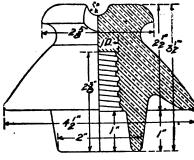
Delivery F. O. B. Factory, East Liverpool and Lisbon, Ohio. For warehouse deliveries write nearest house

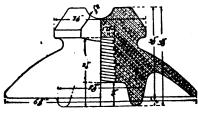
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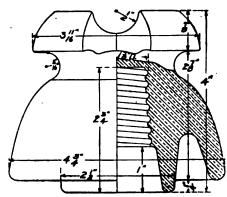
No. 1075

35-









#### PORCELAIN INSULATORS

#### Brown Glaze Furnished Unless Otherwice Specified

#### Insulator No. 1075

#### LINE VOLTAGE 5000

		Weight		List
List	Weight	Packed	Quantity	Price
No.	<b>p</b> er 100	per 100	per Barrel	per 100
1075	124	145 ′	225	\$21.06

#### Insulator No. 1009

#### LINE VOLTAGE 6600

#### Package Data and List Price

List	Weight	Wt. packed	Quantity	List Price
No.	per 100	per 100	per Bbl.	per 100
1009	150 lbs.	175 lbs.	200	<b>\$22.88</b>

#### Voltage Data

Flashove	r in Vol <b>ts</b>	Leakage	Arcing
Dry	Rain	Distance	Distance
55000	23000	5½ ins.	13/4 ins.

#### Insulator No. 1076

#### LINE VOLTAGE 7500

#### Package Data and List Price

List	Weight	Wt. packed	Quantity	List Price
No.	per 10 <b>0</b>	per 100	per Bbl.	per 100
1076	130 lbs.	165 lbs.	200	\$40.0 <del>4</del>

#### Voltage Data

Flashove	r in Volts	Leakage	Arcing
Dry	Rain	Distance	Distance
53000	22000	5¼ ins.	$2\frac{1}{4}$ ins.

#### Insulator No. 1037

#### LINE VOLTAGE 10000

#### Package Data and List Price

List	Weight	Wt. packed	Quantity	List Price
No.	per 100	per 100	per Bbl.	Each
1037	240 lbs.	325 lbs.	50	<b>\$</b> 7.22

#### · Voltage Data

Flashove	r in Volts	Leakage	<ul> <li>Arcing</li> </ul>
Dry	Rain	Distance	Distance
68000	37000	61⁄2 in.	25% ins.

#### Insulator No. 1100 LINE VOLTAGE 10000

#### Package Data and List Price

List	Weight	Wt. packed	Quantity	List Price
No.	per 100	per 100	per Bbl.	Each
1100	340 lbs.	500 lbs.	50	<b>\$</b> 9.27

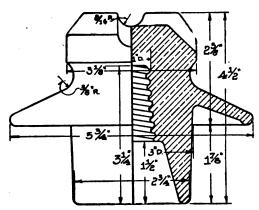
#### Voltage Data

Flashover	in Volts	Leakage	Arcing
Dry	Rain	Distance	Distance
70000	31000	6½ ins.	2¼ ins.
Delivery F. (	O. B. Factory,	East Liverpool	and Liston,
Ohio For war	shouse deliverie	e write negreet h	O11992.

15

#### PORCELAIN INSULATORS

Brown Glaze Furnished Unless Otherwise Specified



#### Insulator No. 1139

#### LINE VOLTAGE 15000

#### Package Data and List Price

 List No.
 Weight per 100
 Wt. packed per 100
 Quantity per Bbi.
 List Price Each

 1139
 320 lbs.
 400 lbs.
 50
 \$7.61

#### Voltage Data

Flashover	r in Volts	Leakage	Arcing
Dry	Rain	Distance	Distance
73000	41000	7½ ins.	31/4 ins.

#### Insulator No. 2020 LINE VOLTAGE 17500

#### Package Data and List Price

List	Weight	Wt. packed	Quantity	List Price
No.	per 100	per 100	per Bbl.	Each
2020	450 lbs.	550 lbs.	40	\$10.29

#### Voltage Data

Flashove	r in Volts	Leakage	Arcing
Dry	Rain	Distance	Distance
81000	47000	9 ins.	$4\frac{1}{8}$ ins.
[Can	be furnished	with 13% inch	pinhole]

#### Insulator No. 2102

#### LINE VOLTAGE 17500

#### Package Data and List Price

List	Weight	Wt. packed	Quantity	<b>List Pri</b> ce
No.	per 100	per 100	per Bbl.	<b>Eac</b> h
2102	320 lbs.	380 lbs.	75	\$8.00

#### Voltage Data

Flashover	in Volts	Ler kage	Arcing
Dry	Rain	Distance	Distance
74000	37000	10 ins.	21/2 ins.

#### Insulator No. 2033

#### LINE VOLTAGE 20000

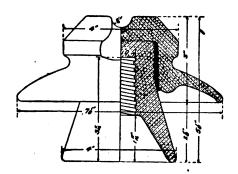
#### Package Data and List Price

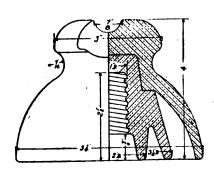
List	Weight	Wt. packed	Quantity	List Price
No.	per 100	per 100	per Bbl.	Each
2033	510 lbs.	63 <b>5 lbs</b> .	30	<b>\$</b> 11.57

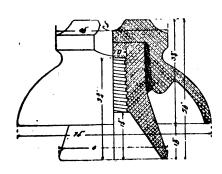
#### Voltage Data

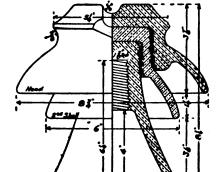
Flashove	r in Vol <b>ts</b>	Leakage	Arcing
Dry	Rain	Distance	Distance
82000	47000	$10\frac{3}{4}$ ins.	$3\frac{3}{4}$ ins.
(Can	be furnished	with 1% inch	pinholel

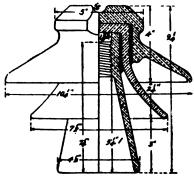
Delivery F. O. B. Factory East Liverpool and Lisbon, Ohio. For warehouse deliveries write nearest house.

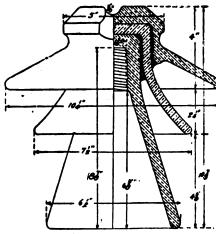


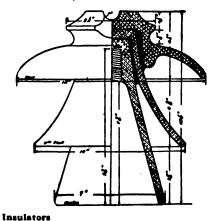












#### PORCELAIN INSULATORS

Brown Glaze Furnished Unless Otherwise Specified

#### Insulator No. 3032

LINE VOLTAGE 35000

Package Data and List Price

 List
 Weight No.
 Wt. packed per 100
 Quantity per 100
 List Price Each

 3032
 1000 lbs.
 1270 lbs.
 12
 \$20.67

#### Voltage Data

Flashover in Volts Leakage Arcing
Dry Rain Distance Distance
122000 82000 21 ins. 5¾ ins.

#### Insulator No. 3002

LINE VOLTAGE 40000

Package Data and List Price

List Weight Wt. packed Quantity No. per 100 per 100 per Crate Each 3002 1250 lbs. 1580 lbs. 6 \$29.12

#### Voltage Data

Flashover in Volts
Dry
Rain
Distance
Distance
Distance
138000
85000
26 ins.
6½ ins.

#### Insulator No. 3001 LINE VOLTAGE 45000

Package Data and List Price

List Weight Wt. packed Quantity List Proc No. per 100 per 100 per Crate Each 3001 1500 lbs. 1920 lbs. 6 \$34.32

#### Voltage Data

Flashover in Volts Leakage Distance Distance Distance Distance T51000 103000 29 ins. 7½ ins.

[Can be furnished with 1 inch pinhole]

#### Insulator No. 3020

LINE VOLTAGE 50000

#### Package Data and List Price

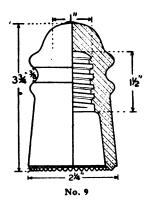
List Weight No. per 100 Wt. packed per 100 Per Crate Each
3020 2330 lbs. 3000 lbs. 3 \$50.34

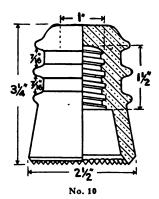
#### Voltage Data

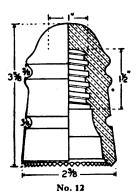
Flashover in Volts Leakage Dry Rain Distance Distance Distance 162000 128000 36 ins. 9 ins.

Delivery F. O. B. Factory, East Liverpool and Lisbon, Ohio. For warehouse deliveries write nearest house.

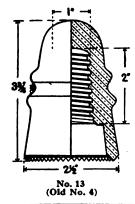
#### **GLASS INSULATORS**

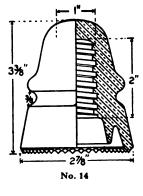


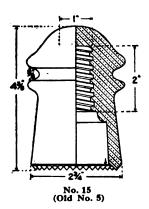




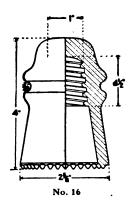
List	Mfr.	Description	Diam.	Weight	Wt. per 1000   Std. P	
No.	No.		Groove	Each	Packed   Quant	
700171 700172 700173	9 10 12	PonyExchange LineDouble Groove Pony		9 ozs. 10 ozs. 10½ ozs.	675 lbs. 760 lbs. 750 lbs.	400 350 400

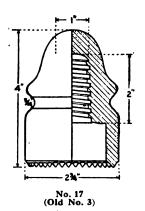


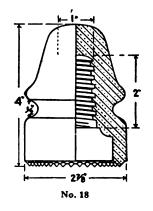




700174 700175 700176	14	National Pony Deep Groove Double Petticoat Pony Western Union	3/8 in. 3/8 in. 3/8 in.	11 ozs. 11½ ozs. 20 ozs.	865 lbs.	300 300 200
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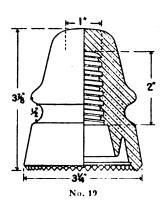


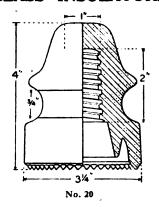


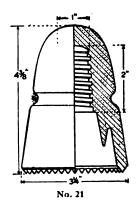
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700177 700178 700179	16 17 18	Long DistanceRegularDeep Groove		15½ ozs.	970 lbs. 1120 lbs. 1200 lbs.	300 250 250
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#### **GLASS INSULATORS**

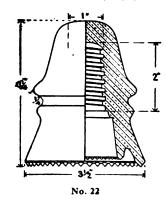


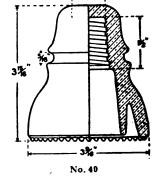




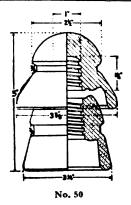
List No.	Mfr. No.	Description	Diam. Groove	Weight Each	Wt. per 1000 Packed	Std. Pkg. Quantity
700180	*19	Deep Groove, Double Petticoat	½ in.	19 ozs.	1350 lbs.	200 7
700181	20	Street Railway or Extra Deep Groove, Double Petticoat	3⁄4 in.	20 ozs.	1375 lbs.	200
700182	21	Standard WU. Double Petticoat	3 g in.	22 ozs.	1550 lbs.	200-

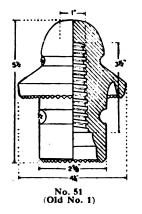
<sup>\*</sup> Also made in Amber, Blue, and Crystal Colors.

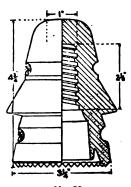




700183 700184	22 40	Western Union Double Petticoat Teat Double Petticoat, new W. U. standard	1/4 in.	1520 lbs. 1550 lbs.	200 200





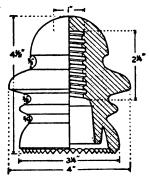


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(Oi	d N	io.	2)

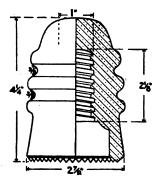
Digitized by Google

700186 700187 700188	50 51 52	Two-piece Transposition Perfect Transposition Transposition	<sup>3</sup> s in. <sup>3</sup> s in. <sup>3</sup> s in.	25 ozs. 34 ozs. 28 ozs.	2500 lbs.	125 100 125
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#### **GLASS INSULATORS**

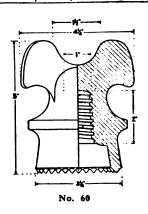


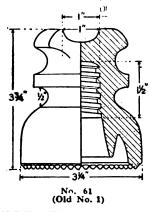
No. 53 (Old'Locke No. 14)

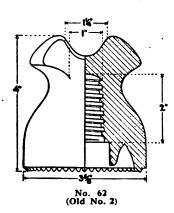


No. 54

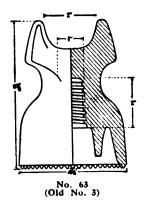
List	Mir.	Description -	Diam.	Weight	Wt. per 1000	Std. Pkg.
No.	No.		Groove	Each	Packed	Quantity
700189	53	Transposition	3⁄8 in.	30 ozs.	2250 lbs.	100

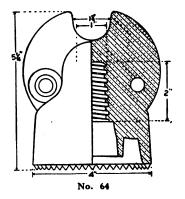






700191 700192 700193 700194	60 60A 61 62	Cable	2 ins. 1 ins.	30 ozs. 30 ozs. 18 ozs. 30 ozs.	2300 lbs. 2300 lbs. 1450 lbs. 2200 lbs.	100 100 200 125
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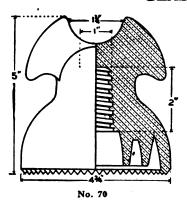


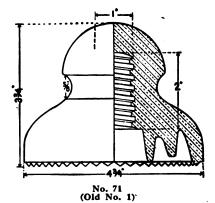


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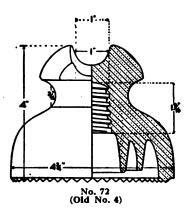
700195 700196	63 64	CableColumbia Double Petticoat	2 ins. 11/4 ins.	48 ozs. 40 ozs.	3600 lbs. 2800 lbs.	65 100
100100	V-		-/4	20 222.2	_	

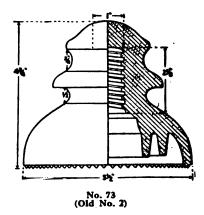
#### **GLASS INSULATORS**



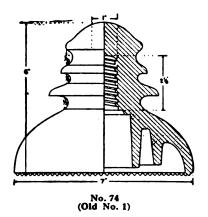


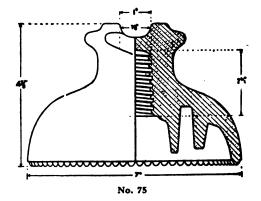
List	Mfr.	Description	Voltages			Diam.	Weight	Wt. per	Std. Pkg.
No.	No.		Line	Dry Test	Wet Test	_	Each	1000 Packed	Quantity
700197	70	High Potential Triple Petti- coat Cable	10000	61900	37800	13/ ins	43 028.	3150 lbs.	65
700198	71	High Voltage	10000	58400	31000			2500 lbs.	100





	High Voltage Provo						
.00200	 	20000	 1.30,000	/4	1 -1 000.	10000 1000	

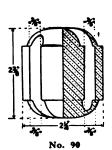




700201	*7A	Provo	10000	93700	55200	8/2 in	151/ The	17000 The 1	25
100201	1.2	1 10 VO	10000	80100	00200	78 111.	10 74 IUS.	I WW IDS.	
700000	<b>\$7</b> 5	7 Inch Muncie	17000	08000	EOLOO	7/ :	(182 Ba	kom ika i	20
100202	110	/ Inch Muncje	17000	00200	1 20100	/8 III.	14 74 108.		50

<sup>\*</sup> Made for 1 inch and 1% inch screws. Weights given are approximate. Prices on application.

#### **GLASS INSULATORS**



Mfr.

No.

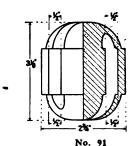
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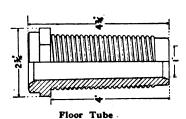
91

List No.

700203

700204



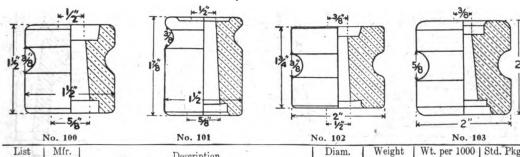


SPAN WIRE INSULATORS

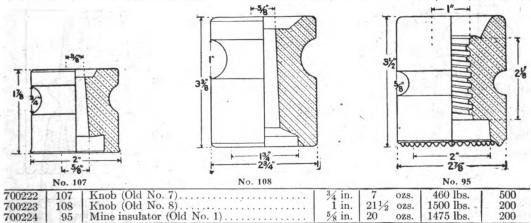
DI AIT WILL	INSCERI	OIG			
Description .	Crushing Strength	Diam. Groove	Weight Each	Wt. per 1000 Packed	Std. Pkg. Quantity
Span wire (Old No. 10) Span wire (Old No. 15)					500 250

•	FLOOR TUBES												
List No.	Mfr. No.	Length Inches	Bore Inches	Description	List No.	Mfr. No.	Length Inches	Bore Inches	Description				
700205 700206 700207 700208	120 121 122 123	2½ 3 3 3	$ \begin{array}{c c} \hline & \frac{3}{4} \\ & \frac{1}{2} \\ & 1 \\ & 1 \\ & 1 \\ & 4 \end{array} $	With screw With screw With screw With screw	760212 700213 700214 700215	127 128 129 130	4 41/2 5 6	1 1 1 1	With screw With screw With screw With screw				
700209 700210 700211	124 125 126	$ \begin{array}{c c} 3\frac{1}{2} \\ 3\frac{1}{2} \\ 4 \end{array} $	1 3/4	Without screw With screw With screw	700216 700217	131 132	6	11/4	With screw Split plain				

#### GLASS KNOBS AND MINE INSULATOR



List	Mfr.	Description	Diam.	Weight	Wt. per 1000	Std. Pkg.
No.	No.		Groove	Each	Packed	Quantity
700218 700219 700220 700221	102	Knob (Old No. 1). Knob (Old No. 1½). Knob (Old No. 2). Knob (Old No. 3).	3/8 in.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	200 lbs. 230 lbs. 440 lbs. 460 lbs.	500 500 500 500



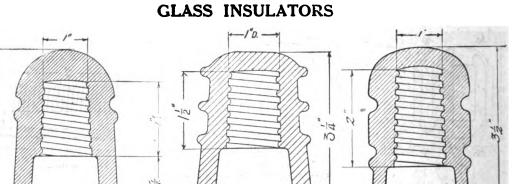
Prices on application. Weights given are approximate.

Insulators

No. 9

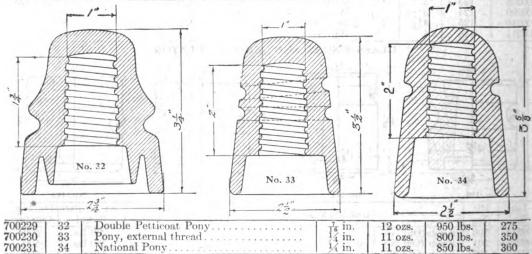
No. 31

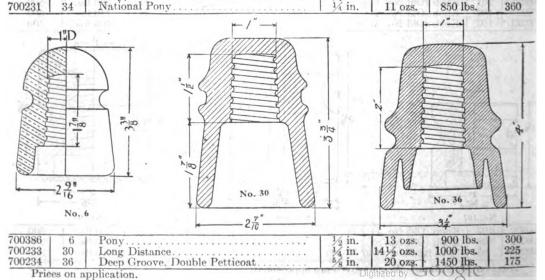
## Western Electric



No. 11

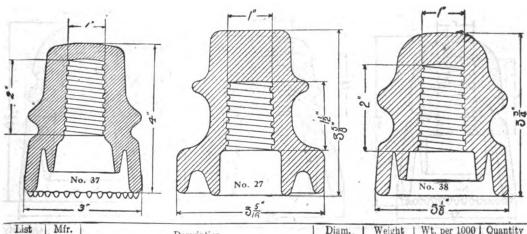
-		25 24"			_ 2"	1000	
List	Mfr.	Description	Diam.	Weight	Wt. per 1000	Quantity	
No.	No.		Groove	Each	Packed	per Bbl.	
700225	9	Pony, without drip points	1/4 in.	10 ozs.	750 lbs.	350	
700226	10		1/4 in.	10 ozs.	750 lbs.	350	
700227	11		1/2 in.	10 ozs.	700 lbs.	400	
700228	31	Double Groove Pony	1/4 in.	10 ozs.	760 lbs.	340	



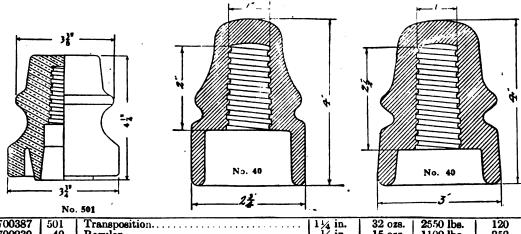


Insulators

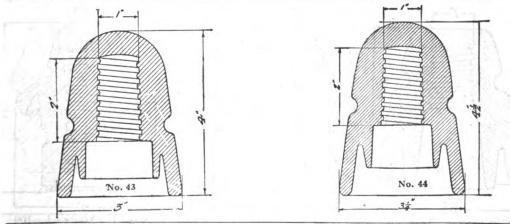
#### GLASS INSULATORS



No.	Mfr. No.	Description	Diam. Groove	Weight Each	Wt. per 1000 Packed	Quantity Per Bbl.	
700235 700236 700237	37 27 38	Deep Groove, Double Petticoat, drip points. Wide Deep Groove, Double Petticoat Extra Deep Groove, Double Petticoat	5/8 in. 1½ ins. ½ ins.	20 ozs. 19 ozs. 19 ozs.	1450 lbs. 1375 lbs. 1375 lbs.	175 175 165	
		<b> </b>		17-04	p-1		



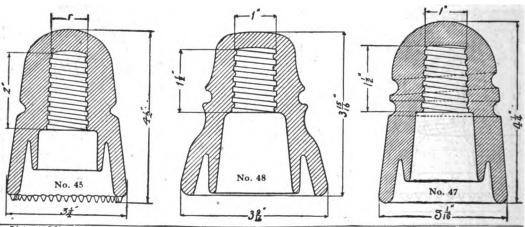
700387 700239 700240	2550 lbs.   120   1100 lbs.   250   1275 lbs.   20	Ó
	i:	275 lbs. 20



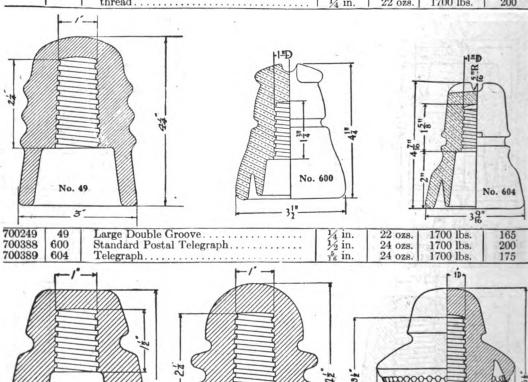
 700242
 43
 Double Petticoat
 1/4 in.
 20 ozs.
 1500 lbs.
 165

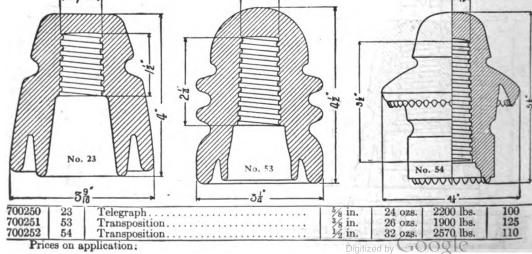
 700243
 44
 Western Union Double Petticoat
 1/4 in.
 22 ozs.
 1700 lbs.
 200

#### **GLASS INSULATORS**

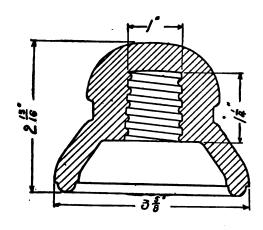


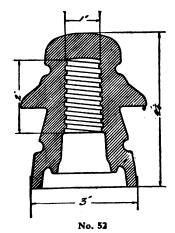
List No.	Mfr. No.	Description	Diam. Groove	Weight Each	Wt. per 1000 Packed	Quantity per Bbl.
700244 700245 700246	45 48 47	Western Union Double Petticoat, drip point New Western Union	1/4 in. 1/4 in.	22 ozs. 21 ozs.	1700 lbs. 1550 lbs.	200 200
	1	thread	1/4 in.	22 ozs.	1700 lbs.	200

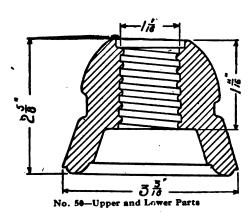


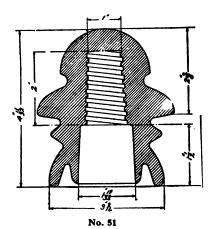


#### **GLASS INSULATORS**

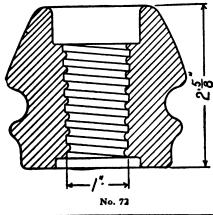


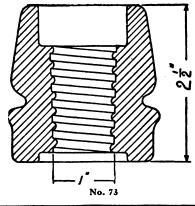






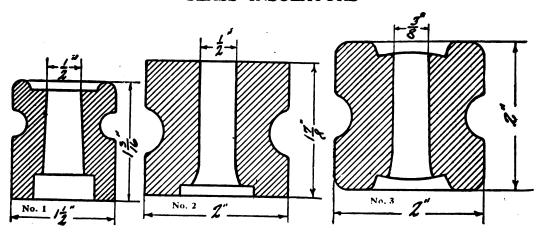
•						
List	Mfr.	Description	Diam.	Weight	Wt. per 1000	Quantity
No.	No.		Groove	Each	Packed	per Bbl.
700259	50	Two Piece Transposition.  Transposition.  Transposition.	1/4 in.	27 ozs.	2000 lbs.	125 prs.
700260	52		1/8 in.	22 ozs.	1700 lbs.	125
700261	51		3/8 in.	29 ozs.	2250 lbs.	100



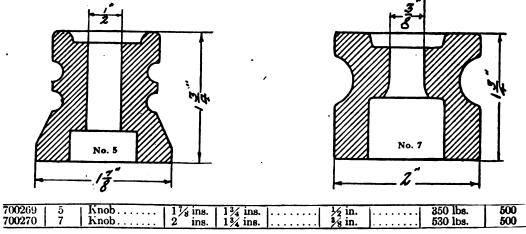


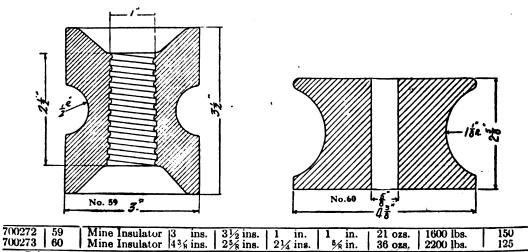
700263   73   Brown or Duplex Pony   1/4 in.   10 ozs.   750 lbs.   350	700262   700263	72 73	Brown or Duplex Deep Groove Brown or Duplex Pony	½ in. ¼ in.	14 ozs. 10 ozs.	950 lbs. 750 lbs.	250 350
---	--------------------	----------	--	----------------	--------------------	----------------------	------------

#### **GLASS INSULATORS**



List No.	Mír. No.	Description	Diam.	Height	Diam. Groove	Diam. Hole	Weight Each	Wt. per 1000 Packed	Quantity per Bbl.
700266	1	Knob	1½ ins.	1 3 ins.		½ in.		220 lbs.	500
700267	2	Knob	Ž ins.	$1\frac{7}{8}$ ins.	l	$\frac{1}{2}$ in.	<b> </b>	500 lbs.	<b>500</b>
700268	3	Knob	2 ins.	2 ins.		3/8 in.		530 lbs.	500



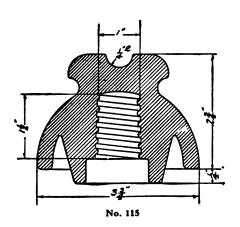


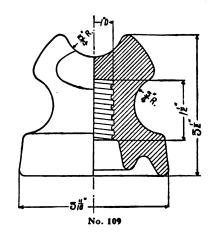
Prices on application.

36

Digitized by GOOGIC

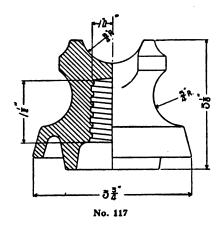
#### **GLASS INSULATORS**

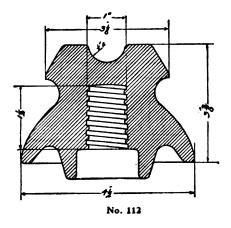




List	Mfr.	Description	Line	Radius	Weight	Wt. per 1000	Quantity
No.	No.		Voltage	Groove	Each	Packed	per Bbl.
700274	115*	Top Groove, Double Petticoat Top Groove, Double Petticoat	5000	1/4 in.	22 ozs.	1750 lbs.	150
700275	109		6600	3/4 in.	23 ozs.	1950 lbs.	160

<sup>\*</sup>Radius side groove 5 inch.





700278	117	Large Top Groove, Double Petticoat	5000	3/4 in.	22 ozs.	1650 lbs.	150
700279	112	Large Top Groove, Double Petticoat	5000	$\frac{1}{2}$ in.	29 ozs.	2150 lbs.	110

Prices on application.

2160 lbs.

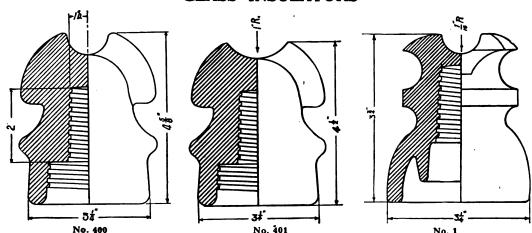
2260 lbs.

36 ozs.

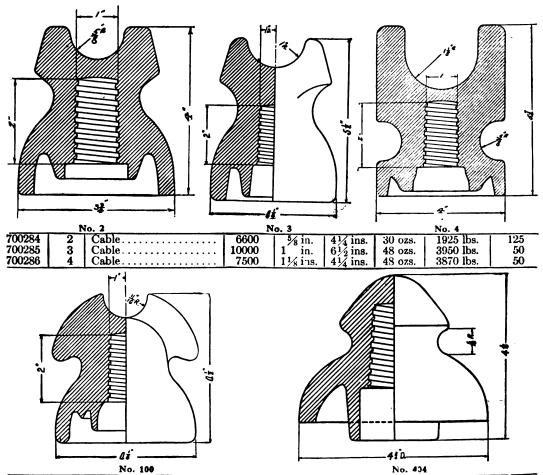
60

120

#### **GLASS INSULATORS**



		110. 101			110. 1			
List No.	Mfr. No.	Description	Line Voltage	Radius Groove	Leakage Distance	Weight Each	Wt. per 1000 Packed	Quantity per Bbl.
700281 700282 700283	401	Cable Cable Cable	6600 6600 6600	5/8 in. 1 in. 1/6 in.	4½ ins.	30 ozs. 30 ozs. 18 ozs.	2100 lbs. 2100 lbs. 1385 lbs.	110 110 170



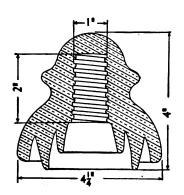
100 **404** 700288 7500 33 ozs. Prices on application.

700287

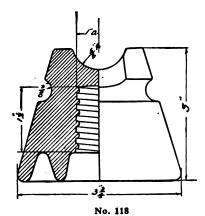
₩ in.

6600

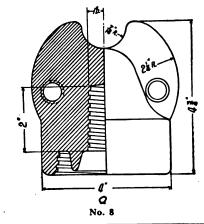
#### **GLASS INSULATORS**



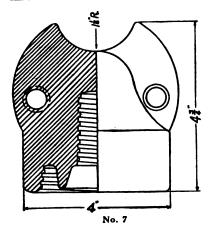
No. 135

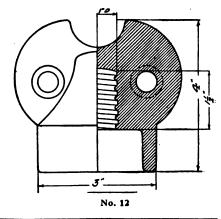


List	Mfr.	Description	Line	Radius	Weight	Wt. per 1000	Quantity
No.	No.		Voltage	Groove	Each	Packed	per Bbl.
700390 700290	135 118	Triple PetticoatLarge Top Groove, Double Petticoat	10000 6600	5 in. 5/8 in.	30 ozs. 21 ozs.	2200 lbs. 1650 lbs.	125 150



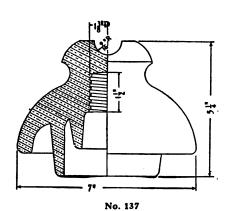
700292 8 Columbia Double Petticoat 6600 7 in. 40 ozs. 2900 lbs.	00292 8 Columbia Double Petticoat	2900 lbs.

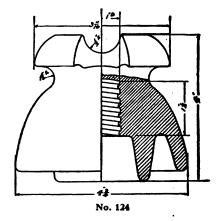




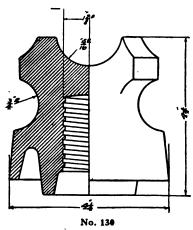
700293 700294		Columbia Double Petticoat Columbia Single Petticoat	1½ ins.		2900 lbs. 1750 lbs.	78 110
Pric	es on s	pplication.	Djgit	ized by 🕒	oogle	

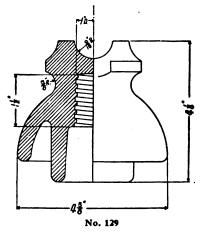
#### **GLASS INSULATORS**



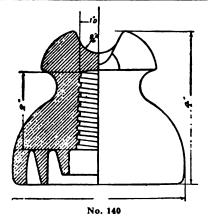


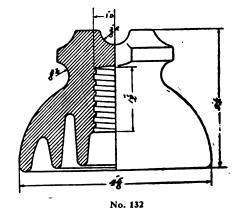
List	Mfr.	Description	Line	Diam.	Weight	Wt. per 1000	Quantity
No.	No.		Voltage	Groove	Each	Packed	per Bbl.
700391	137	High Voltage, Triple Petticoat	20000	⅓ in.	6 lbs.	`6535 lbs.	33
700297	124	High Voltage, Double Petticoat.	10000		44 ozs.	3300 lbs.	50





700298	130	High Voltage, Double Petticoat.	11000		40 ozs.	3300 lbs.	60
700299	129	High Voltage, Double Petticoat.	10000	1½ in.	33 ozs.	2600 lbs.	75





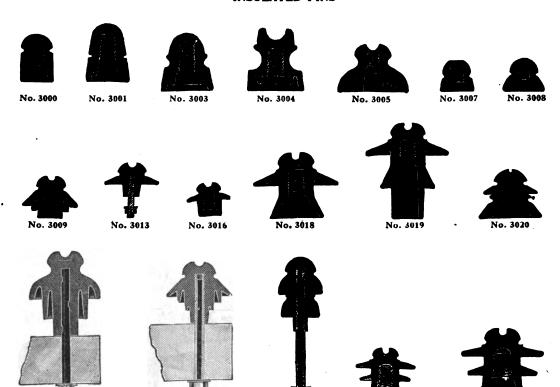
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700300	140 1	High Voltage, Triple Petticoat	1 10000	1 1 % in.	32 ozs.	2560 lbs.	125
700301	132	High Voltage, Triple Petticoat	11000				

No. 3006

### **ELECTROSE LINE INSULATORS**

### **INSULATED PINS**



## Pin Type Insulators

No. 3010

### . INSULATORS 1,000 TO 1,000,000 VOLTS

No. 3012

No. 3084

List No.	Diameter in Ins.	Height of Body in Ins.	Width of Top Groove in Ins.	Width of Side Groove in Ins.	Diameter of Pinhole in Ins.	Depth of of Pinhole in Ins.	Electrical Value Dry in Volts	Electrical Value Rain in Volts	Line Voltage	Net Weight Each in Lbs.	List Price Each
3000 3001 3003 3004	$2\frac{1}{4}$ $3\frac{1}{16}$ $3\frac{3}{4}$ $4\frac{1}{8}$	33/8 41/8 4 41/2	11/2	$   \begin{array}{c}                                     $	1 1 1	$1\frac{7}{8}$ $1\frac{18}{18}$ $2\frac{1}{4}$ $2\frac{1}{18}$	39000 42000 42000 43000	20000 20000 20000 26000	2200 6600 6600 6600	1½ 1¼ 1½ 1¼	\$0.72 1.35 1.62 1.80
3005 3006 3007 3008 3009	57/8 57/8 215 318 41/2	$     \begin{array}{r}       3 \frac{15}{6} \\       7 \\       25/8 \\       2\frac{13}{16} \\       31/8     \end{array} $	1½ 1½ ···	$1\frac{1}{8}$ $1\frac{1}{8}$ $1\frac{1}{4}$ $1\frac{1}{4}$ $3\frac{1}{8}$	Note 1 1 1	$1\frac{5}{8}$ $1\frac{13}{16}$ $1\frac{5}{16}$ $1\frac{13}{16}$	52000 80000 10000 20000 40000	30000 45000  5000 28000	11000 22000  1100 6600	2¾   1¼	3.60 7.20 .72 1.08 1.80
3010 3012 3013 3016	4½ 3½ 3¾ 3¾ 3¾	$4\frac{1}{2}$ $5\frac{3}{8}$ $2\frac{3}{8}$ $2\frac{7}{8}$	3/4 3/4 3/4 3/4	3/8 3/8 3/8 3/8	Note Note Note	15/8	60000 50000 40000 39000	28000 25000 25000 25000	11000 11000 6600 6600	2 i ½ 34	2.70 3.60 1.26 1.26
3018 3019 3020 3084 3085	7 7 5 5 7	5½ 8 3½ 4¼ 6	3/4 3/4 3/4 3/4 3/8 5/8 3/4	1/4/8/8/8/8/8/8/2/2/76/8/1/1/776/8/1/2/2/76/8/2/2/2/76/8/2/2/2/76/8/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/	13/8 13/8 1 1 13/8	$2\frac{1}{4}$ $2\frac{1}{4}$ $2\frac{1}{2}$ $1\frac{11}{16}$ $2\frac{3}{16}$	80000 100000 65000 70000 85000	45000 60000 35000 40000 55000	22000 22000 11000 11000 22000	31/4 13/4 	4.14 5.40 3.06 3.06 5.40

Note: No. 3006 has  $\frac{3}{4}$  inch diameter steel pin. No. 3010 has  $\frac{5}{8}$  inch diameter steel rod. No. 3012 has  $\frac{5}{8}$  inch diameter steel tube. No. 3013 has  $\frac{3}{8}$  inch rod,  $1\frac{1}{2}$  inch extension.

Specify size pinhole desired.

Delivery F. O. B. Factory, Brooklyn, N. Y. For warehouse deliveries write nearest house.

No. 3085

# **ELECTROSE SAFETY STRAIN INSULATORS**



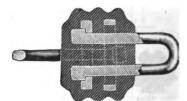
No. 10A-B. (Old Style)



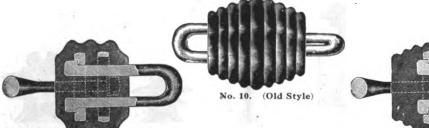
No. 10 (New Type)



No. 10. (New Type)



No. 10. (New Type)



No. 10X. (New Type)



No. 10X. (Old Style)

### Safety Strain Insulators

List No.	Diam. in Ins.	Length of Body in Ins.			Breaking Strength in Lbs.	Mechan-		Electrical Value Rain in Volts	Test Voltage Dry in Volts	Line Voltage	Net Weight Each in Lbs.	List Price Each
Old 10 Old	4 (Combin	4 1	1 th x 7/8	8 1	20000	10000	40000	20000	15000	11000	41/4	\$392.00
10AB	Nos. 1	IOA and	1 th x 3%	141/8	20000	10000	70000	35000	30000	15000	814	852.00
Old 10X	10B)	1.44	1 1 x 78	8 많	20000	10000	40000	20000	15000	11000	43%	420.00
10AB		nation of 10A and	134 x 38	121/8	20000	10000	75000	40000	35000	20000	71%	10.96
10ADA	(Combin	nation of DA, 10D	11/2 x 7/8	16 ♣	20000	10000	100000	50000	45000	25000	101/6	16.72
New 10	4	3	11/2 x 1/8	7 11	20000	10000	45000	25000	20000	11000	356	5.12
10A 10B	1 1	3	11/2 x 7/8		20000 20000	10000 10000	45000 45000	25000 25000	20000 20000	11000	35 g	5.46 5.46
10C	4	3	1/2 1/8	5	20000	10000	45000	25000	20000	11000	35%	5.80
10D	4	3	1131143	5.	20000	10000	45000	25000	20000	11000	35%	5.80 5.68
10G 10H	1 1	3 3	11/2 x 1/8		20000 20000	10000 10000	45000 45000	25000 25000	20000 20000	11000 11000	3%	5.68
10X	1 4	3	114 x 74	7 12	20000	10000	45000	25000	20000	11000	348	5.40

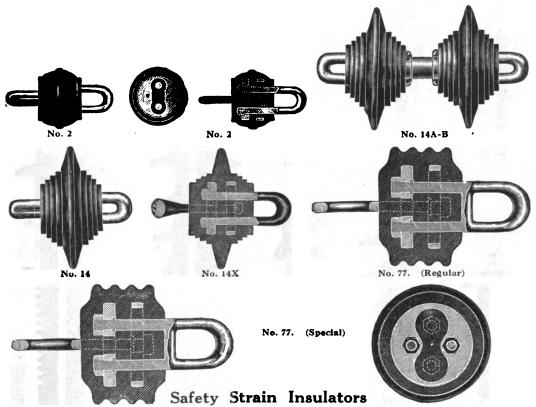
 $<sup>10</sup>A-\frac{5}{6}$  inch threaded socket at one end.  $10B-\frac{5}{6}$  inch threaded stem at one end.

<sup>10</sup>C-5 inch threaded socket at each end.

<sup>10</sup>D—% inch threaded stem socket at each end.
10F— inch clevis at one end.
10G— inch clevis at one end.

<sup>10</sup>H-H inch clevis at one end.

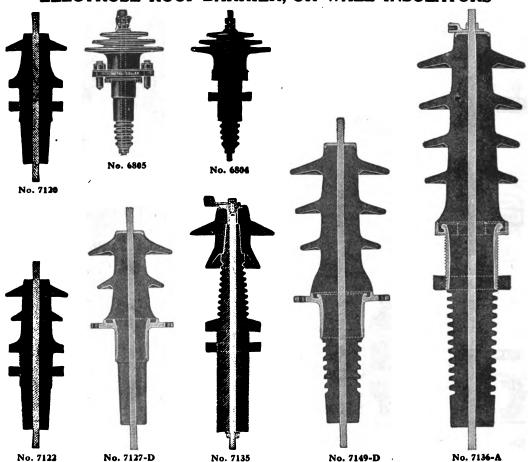
### **ELECTROSE SAFETY STRAIN INSULATORS**



List No.	Diam. in Ins.	Length of Body in Ins.	Opening of Eye in Ins.		Breaking Strength in Lbs.	Mechan-	Electrical Value Dry in Volts	Electrical Value Rain in Volts	Test Voltage Dry in Volts	Line Voltage	Net Weight Each in Lbs.	List Price per 100
1 1A	234 234	23/8 23/8 nation of	1¼ x ¾ 1¼ x ¾	5½ 4 3/16	10000 10000	5000 5000	20000 20000	10000 10000	7000 7000	3500 3500	1½ 1½	\$163.00 187.00
1ADA		1A, 1D	11/4 x 3/4	121/2	10000	5000	50000	30000	29000	11000	41/2	595.00
1B 1C 1D 1I 1K 1X 2 2X 7	23444 23344 23344 23444 23144 2314 2314	23/8 23/8 23/8 23/8 23/8 23/8 23/8 23/8	11/4 x 3/4 11/4 x 3/4 11/8 x 3/4 1 x 5/8 1 x 5/8 1 x 3/4 1 x 3/4	4 1 1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	10000 10000 10000 10000 10000 10000 7000 7000 10000	5000 5000 5000 5000 5000 5000 4000 4000	20000 20000 20000 20000 20000 20000 12000 12000 25000 25000	10000 10000 10000 10000 10000 10000 7000 7000 12000 12000	7000 7000 7000 7000 7000 7000 5000 5000	3500 3500 3500 3500 3500 3500 2500 2500	11/2 11/2 11/2 13/4 15/8 13/4 13/4 13/4	187.00 211.00 211.00 243.00 203.00 186.00 121.00 138.00 168.50 192.50
7AB		7A and	1 x 3/4	91/2	10000	6000	40000	25000	20000	11000	31/2	601.50
7ADA	(Combin	nation of 7A, 7D	1 x 34	131/4	10000	6000	60000	35000	25000	13000	51/4	192.50
7B 7C 7D 7F 17G 17X 4 4AB 14ADA 14X 77 Reg. 77 Spec. *77A *77B	31/8 31/8 31/8 31/8 31/8 31/8 55 55 55 57/8 115	25.5 5.8 5.8 5.8 5.8 5.8 5.8 5.8 5.8 5.8	1 x 8/4 x 8/	5 4 5 8 8 8 8 4 4 4 4 4 4 4 4 4 4 4 4 4	10000 10000 10000 10000 10000 10000 10000 10000 10000 40000 50000	6000 6000 6000 6000 6000 6000 6000 600	25000 25000 25000 25000 25000 25000 25000 45000 60000 -25000 100000	12000 12000 12000 12000 12000 12000 15000 25000 35000 15000 60000	10000 10000 10000 10000 10000 15000 25000 25000 15000 40000 50000	6600 6600 6600 6600 6600 6600 11000 13200 6600 22000 33000	184 184 184 27/8 21/8 21/8 21/4 21	216.50 216.50 248.50 208.50 192.00 282.00 680.00 1020.00 226.00 64.00 100.00 205.00 Prices
*77B	1834	131/8	6 16 x 4 116	341/8	11111							Appl

Nos. 1A and 7A have a \$\frac{5}{2}\$ inch threaded socket at one end.
Nos. 1B and 7B have a \$\frac{5}{2}\$ inch threaded stem at one end.
Nos. 1C and 7C have a \$\frac{5}{2}\$ inch threaded socket at each end.
Nos. 1D and 7D have a \$\frac{5}{2}\$ inch threaded stem at each end.
Nos. 1K and 7G have a \$\frac{5}{2}\$ inch clevis at one end.
Nos. 1I and 7F have a \$\frac{5}{2}\$ inch clevis at each end.
Nos. 1I and 7F have a \$\frac{5}{2}\$ inch clevis at each end.
No 14 can be furnished with special terminals, same as the No. 7. 46

# **ELECTROSE ROOF BARRIER, OR WALL INSULATORS**



### Roof Barriers and Wall Insulators

These insulators are adapted for indoor or outdoor service. The connecting rods are imbedded permanently in the electrose insulation, making a watertight construction. Various patented methods of locking the insulators to the roof, wall, transformer, tank, cover, etc., are shown. The insulators can also be furnished with through holes if desired.

	······ ······ ····· ····	com accomodi	Diameter of			
List	Overall	Diameter of	Section Fitting	Locking	Diameter of	Net Wgt.
No.	Height	Largest Disk	into Barrier	Space	Conductor Rod	Each
6804	13 ins.	$6\frac{1}{2}$ ins.	2 ins.	$2\frac{1}{4}$ ins.	3/8 ins.	45% lbs.
6805	13 ins.	$6\frac{1}{2}$ ins.	2 ins.	• • • • • • •	3/8 ins.	7½ lbs.
7120	13% ins.	$5\frac{1}{8}$ ins.	2 <del>11</del> ins.	2 ins.	½ ins.	5 lbs.
7122	16 ins.	6 ins.	2 <del>11</del> ins.	2 ins.	½ ins.	8 lbs.
7127D	19 ins.	7 ins.	2 <del>11</del> ins.		$\frac{1}{2}$ ins.	15 lbs.
7135	21 ins.	7 ins.	2 <del>11</del> ins.	7 ins.	½ ins.	10 lbs.
7136A	37 ins.	9 ins.	$4\frac{1}{2}$ ins.	3⅓ ins.	⅓ ins.	43 lbs.
7149D	27 ins.	3 ins	$3\frac{1}{2}$ ins.	• • • • • •	⅓ ins.	25 lbs.

### LIST PRICES AND DATA

		-Electrical Value	s				
List	Rain Test	Dry '	Test	Puncture Value	Tested	Line	List Price
No.	Upper End	Upper End	Lower End	in Oil	To	Voltage	Each
6804	30000 v.	60000 v.	60000 v.	85000 v.	60000 v.	11000 v.	\$18.00
<b>6805</b>	40000 v.	60000 v.	60000 v.	85000 v.	60000 v.	11000 v.	27.00
7120	25000 v.	60000 v.	50000 v.	135000 v.	50000 v.	6600 v.	12.60
7122	50000 v.	80000 v.	45000 v.	135000 v.	45000 v.	16500 v.	16.20
7127D	60000 v.	100000 v.	65000 v.	135000 v.	65000 <b>▼</b> .	22000 v.	28.80
7135	60000 v.	110000 v.	80000 v.	135000 v.	80000 v.	22000 v.	<b>28</b> .80
7136A	135000 v.	180000 v.	115000 v.	200000 v.	115000 v.	44000 v.	84.60
7149D	85000 v.	135000 v.	75000 v.	170000 v.	75000 v.	33000 ▼.	50.40

Delivery F. O. B. Brooklyn, N. Y. For warehouse deliveries write nearest house.

### ELECTROSE LOCKING INSULATING BUSHINGS AND **NECTORS**







No. 6210. With a 1/2 Inch Rod This Is No. 6821



No. 6266



No. 6275



No. 6277



No. 6282







No. 6811 With ½ Inch Through Hole, This Is No. 6222

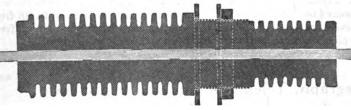
No. 6815

No. 6833

No. 6851

### Locking Insulating Bushings and Connectors

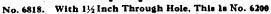
List Overall Section Fitting Largest Diameter of Electrical Values Net Wt.	List Price Each
	Each
No. Length Into Barrier Diameter Rod or Hole Dry Test Rain Test Line Voltage Each	
6200 23 ins. 4½ ins. 7 ins. 1½ ins. 100000 v. 80000 v. 44000 v. 13¾ lbs.	<b>\$</b> 23.40
6206 614 ins. $1\frac{7}{8}$ ins. $2\frac{1}{2}$ ins. $\frac{1}{2}$ in. 50000 v. 20000 v. 6600 v. $\frac{1}{2}$ lbs.	3.60
6210 27½ ins. 5 ins. 7 ins. 1½ ins. 180000 v. 120000 v. 66000 v. 40 lbs.	81.00
6222 15 ins. 2 1 ins. 4 1/2 ins. 1/2 in. 75000 v. 50000 v. 22000 v. 4 7/4 lbs.	9.00
6226 33 1/4 ins. 7 1/4 ins. 9 1/4 ins. 3 1/4 ins. 185000 v. 130000 v. 66000 v. 70 lbs.	135.00
6266 57 ins. 1 ins. 1 ins. 1 ins. 3 in. 45000 v. 15000 v. 6600 v. 56 lbs.	3.06
6275 234 ins. 1 in. 1 in. 1 in. 30000 v 2200 v. 14 lb.	1.08
6277 9 $\frac{3}{6}$ ins. 2 $\frac{1}{4}$ ins. 3 $\frac{5}{8}$ ins. $\frac{11}{4}$ in. 60000 v. 35000 v. 11000 v. 2 $\frac{3}{4}$ lbs.	5.40
6282 5 $\frac{1}{16}$ ins. 1 in. 2 ins. $\frac{1}{16}$ in. 45000 v. 20000 v. 6600 v. $\frac{1}{16}$ lb.	2.16
6296 11½ ins. $37%$ ins. 5 ins. $134$ ins. 55000 v. 25000 v. 11000 v. $614$ lbs.	10.80
6811 18 ins. 2 1 ins. 4 1/2 ins. 1/2 in. 75000 v. 50000 v. 22000 v. 6 lbs.	12.60
6815 914 ins. 11/4 ins. 21/4 ins. 11	5.04
6833 7% ins. 1 th ins. 1 th ins. 1 ins. 45000 v. 15000 v. 6600 v. 1/4 lbs.	3.60
6845 $4\frac{3}{4}$ ins. 1 in. $1\frac{1}{2}$ ins. $\frac{3}{6}$ in. 30009 v 2200 v. $\frac{3}{6}$ lb.	1.62
6851 61 ins. 1 in. 2 in. 1/4 in. 45000 v. 20000 v. 6600 v. 1/8 lb.	2.52





No. 6816. With a 31/2 Inch Hole, This Is No. 6226





No. 6858



No. 7211

# Locking Insulating Bushing and Connectors

		Diameter of							
List	Overall	Section Fitting	Largest	Diameter of	E	lectrical Value	9	Net Wt.	List Price
No.	Length	Into Barrier	Diameter	Rod or Hole	Dry Test	Rain Test	Line Voltage	Each	Each
6816	3116 ins.	71/4 ins.	914 ins.	1 in.	185000 v.	130000 v.	66000 v.	100 lbs.	\$180.00
6818	26 ins.	4 12 ins.	7 ins.	14 in.	100000 v.	80000 v.	44000 v.	19 lbs.	34.20
6821	3134 ins.	5 ins.	7 ins.	34 in.	180000 v.	120000 v.	66000 v.	45 lbs.	93.60
6858	123% ins.	21/2 ins.	35/4 ins.	12 in.	60000 v.	35000 v.	11000 v.	33/ lbs.	7.56
6867	14 16 ins.	3 1/2 ins.	5 ins.	13 in.	55000 v.	25000 v.	11000 v.	812 lbs.	14.40
7211	8% ins.	3% ins.		11/4 x 11/4 x 61/4		25000 v.	11000 v.	4 1/2 lbs.	8.10
1211	078 1115.	o/g ius.	U 1110.	./2 = 1/4 = 4/2	00000 11	20000 1.	**************************************	2/2	0.10

The locking ring construction as illustrated enables the insulator to be locked on to the barrier quickly and easily, obviating the costly and awkward cementing process. In the connectors the conductor rod is permanently imbeded in the electrose insulation, making a water and air-tight construction. Delivery F. O. B. Brooklyn, N. Y. For warehouse deliveries write nearest house.

### Western Electric

### **WOOD POLES**

### Poles

The Western Electric Company is noted for the quality of the poles it handles and the service it renders. Our facilities for securing stock, our large and numerous concentrating yards, make it possible for us to meet any demand at a moment's notice. Our record has given us an enviable reputation in the pole business throughout the United States and Canada.

In order to give our friends and patrons a more intimate knowledge of what we can supply in the way of poles and pole-line material, we have assembled in these pages a representative list of the standard stocks carried by us.



Section of One of Our Many Pole Yards

### Large Posts and Small Poles

Northern White Cedar Association Specification

"Sizes 4 inch 10 foot to 4 inch 18 foot inclusive. Sizes at top may be  $\frac{1}{4}$  inch less than the diameter specified. Four inch 20 foot poles circumference measurement at top end 12 inches for seasoned stock and 12½ inches for green or water soaked stock, 5 inch top and larger 20 foot poles take same circumference top measurement as longer poles of same size. Lengths may be two inches scant. On posts and poles 10. 12, 14, 16 feet long, 4 inch crook one way allowed. Eighteen and 20 foot poles, 4 inch crook one way allowed, the sweep to be measured from a point 4 feet from the butt. Pipe holes in top allowed. Must be cut from live timber and in other respects, except as above mentioned, conform to post specifications. Green, fresh cut or water soaked stock must be plump measure for the diameter or circumference specified."

### Standard Telegraph, Telephone and Electric Poles

Northern White Cedar Association Specification

"Sizes 4 inch 25 feet and upwards. Above poles must be cut from live growing timber, peeled and reasonably well proportioned for their length. Tops must be reasonably sound, must measure in circumference as follows: seasoned 4 inch poles, 12 inches; 5 inch poles, 15 inches; 6 inch poles, 18½ inches; 7 inch poles, 22 inches. If poles are green, fresh cut or water soaked, then 4 inch poles must measure 12½ inches; 5 inch poles, 16 inches; 6 inch poles, 19½ inches; 7 inch poles, 22¾ inches in circumference at top end. Lengths may be ½ inch scant for each 5 feet in length and 6 inches long for any length from 20 feet up.

"One way sweep allowable not exceeding 1 inch for every 5 feet, for example, in a 25 foot pole, sweep not to exceed 5 inches, and in a 40 foot pole, 8 inches. Measurement for sweep shall be taken as follows: That part of the pole when in the ground (6 feet) not being taken into account in arriving at sweep, tightly stretch a tape line on the side of the pole where the sweep is greatest, from a point 6 feet from the butt to the upper surface at top, and having so done measure widest point from tape to surface of pole and if, for illustration, upon a 25 foot pole said widest point does not exceed 5 inches, said pole comes within the meaning of these specifications. Butt rot in the center including small ring rot outside of the center; total rot must not exceed 10 per cent. of the area of the butt. Butt rot of a character which plainly seriously impairs the strength of the pole above ground is a defect. Wind twist is not a defect unless very unsightly and exaggerated. Rough, large knots if sound and trimmed smooth are not a defect."

### Western Electric

### WOOD POLES

### Northern White Cedar Poles

### Northern White Cedar Association Specifications

Diam.		Approx.			Diam.		Approx.		
Top	Length	Weight	No. to (	Carload	Top	Length	Weight	No. to	Carload
Inches	Feet	Lbs.	From	To	Inches	Feet	Lbs.	From	То
4	16	85	340	400	6	30	350	90	125
5	16	105	300	400	61/2	30	350	75	100
6	16	135	230	300	7 2	30	450	75	100
7	16	165	$\overline{200}$	250	8	30	600	50	75
8	16	200	150	225	5	35	400	75	100
9	16	300	100	130	$5\frac{1}{2}$	35	400	75	100
4	18	95	325	400	6	35	450	75	100
5	18	125	250	300	61/2	35	450	60	. 80
6	18	155	200	250	7	35	600	50	75
7	18	200	150	225	8	35	850	40	60
8	18	325	95	125	6	40	625	50	<b>7</b> 5
9	18	425	90	125	61/2	40	625	45	60
4	20	100	300	400	7	40	850	40	60
5	20	130	230	300	8	40	1100	30	45
$5\frac{1}{2}$	20	130	230	<b>30</b> 0	Fol	lowing eigo	s require two	one for ohir	nina
6	20	190	150	225	101	, ,	•	-	hing
7	20	250	125	150	6	45	900	60	80
8	20	350	90	125	7	45	1100	50	<b>7</b> 0
9	20	450	<b>7</b> 5	<b>10</b> 0	8	45	1350	45	60
5	22	175	175	<b>25</b> 0	6	50	1150	50	70
4	25	150	200	<b>25</b> 0	7	50	1350	45	60
5	25	200	150	<b>22</b> 5	8	50	1700	35	<b>4</b> 5
$5\frac{1}{2}$	25	200	135	190	6	55	1400	40	50
6	25	250	125	150	7	55	1700	35	45
$6\frac{1}{2}$	25	250	100	130	8	<b>55</b>	<b>2200</b>	25	35
7	25	350	90	125	7	60	<b>220</b> 0	25	35
8	25	425	90	125	8	60	2500	22	<b>3</b> 0
5	30	275	110	175	7	65	2500	22	30
$5\frac{1}{2}$	30	275	100	130	8	65	<b>300</b> 0	18	25

Prices on application.

### A. T. and T. Co., Western Union and Nat. Electric Light Association Specifications

	Y41	Circum.	Circum. 6 Feet	Approx.		T amouth	Circum.	Circum. 6 Feet	Approx
O1	Length	Top Inches	from Butt Inches	Weight Lbs.	Class	Length Feet	Top Inches	from Butt Inches	Weight
Class	Feet		Thenes		1 .				Lbs.
$\mathbf{G}$	20	$12\frac{1}{2}$	• • • •	100	Ι <u>Λ</u>	35	24	43	850
F	20	$15\frac{1}{2}$	• • • •	130	E	40	$18\frac{3}{4}$		625
D	20	171/4		130	D	40	$18\frac{3}{4}$		625
$\mathbf{C}$	20	$18\frac{3}{4}$	27	190	C	40	1834	40	625
$\mathbf{E}$	22	$15\frac{1}{2}$		175	B	40	22	43	850
D	22	171/4		175	A	40	24	47	1100
$\mathbf{C}$	22	$18\frac{3}{4}$	281/2	250					
В	22	22	30	275	Fol	lowing sizes	require two	cars for ship	ping
$\overline{\mathbf{G}}$	25	121/2		150	1	Ü	•	•	
F	25	151/2		200	E	45	22		1100
Ē	25	$17\frac{1}{4}$		200	D	45	22		1100
$\overline{\mathbf{D}}$	25	1834		250	l C	45	$18\frac{3}{4}$	43	900
č	25	1834	30	250	В	45	22	47	1100
B	25	22	32	350	A	45	24	50	1350
Ā	25	24	36	425	D	50	22	•••	1350
Ď	30	1834		<b>3</b> 50	C	50	183/4	46	1150
$\tilde{\mathbf{c}}$	30	1834	33	350	B	50	22	50	1350
B	30	22	36	450	Ā	50	24	53	1700
Ā	30	$\overline{24}$ .	40	600	B	55	$\overline{22}$	53	1700
Ď	35	1834		450	Ā	55	$\overline{24}$	56	2200
č	35	1834	36	450	B	60	$\mathbf{\tilde{2}}\mathbf{\tilde{2}}$	56	2200
$\mathbf{\tilde{B}}$	35	22	38	600	Ā	60	24	59	2500
_	_					D:		oole	

Prices on application.

### WOOD POLES

### Western or Idaho Cedar Poles

Western Red Cedar Association Specifications

"All poles must be cut from live, growing cedar timber, peeled, knots trimmed close, butts and tops sawed square, tops must be sound and must measure as follows in circumference:

4 in. top, 12 in. circ.

5 in. top, 15 in. circ.

8 in. top, 25 in. circ.

9 in. top, 28 in. circ.

9 in. top, 28 in. circ.

10 in. top, 31 in. circ.

sawed square, tops must be sound and must measure as follows in circumference:

4 in. top, 12 in. circ.

7 in. top, 22 in. circ.

9 in. top, 28 in. circ.

5 in. top, 15 in. circ.

8 in. top, 25 in. circ.

10 in. top, 31 in. circ.

"No pole shall have more than one crook and this shall be one way only, the sweep not to exceed 1 inch to every 6 feet in length. Same to be determined in the following manner: Measurement for sweep shall be taken as follows: That part of the pole when in the ground (6 feet) not being taken into account in arriving at sweep, tightly stretch a tape line on the side of the pole where sweep is greatest, from a point 6 feet from butt to the upper surface at top, and having so done measure widest point from tape to surface of pole and if, for illustration, upon a 30-foot pole said widest point does not exceed 5 inches, said pole comes within the meaning of these specifications. meaning of these specifications.

"Butt rot in center, including small ring rot, shall not exceed 10 per cent. of the area of the butt. Butt rot of a character which impairs the strength of the pole above ground is a defect.

"Large knots, if sound and trimmed smooth, are not a defect.

"A perfectly sound, dead or dry streak shall not be considered a defect when it does not materially impair the strength of the pole."

Diameter Top	Length	Estimated	Diameter Top	Length	Estimated
Inches	Feet	Wt., Lbs.	Inches	Feet	Wt., Lbs.
4	20	100	Following size	es require two	cars for shipping.
<b>5</b> .	20	135	]] 7	45	850
6	20	190	8	45	1000
7	20	260	9	45	1200
8	20	325	7	50	1050
4	25	150	8	50	1200
5	$\overline{25}$	200	9	50	1400
.6	$\overline{25}$	250	8	55	1400
7	$\overline{25}$	325	9	55	1600
8	$\overline{25}$	400	8	60	1600
6	30	350	9	60	1850
ž	30	400	8	65	1850
Ř	30	500	) ğ	65	2200
Ŕ	35	450	8	70	2200
7	35	500	$\parallel$ $\tilde{9}$	7Ŏ	2600
8	35	625	ll š	75	2600
9	35	800	9	75	3000
Ř	40	600	8	80	3000
7	40	650	9	80	3500
8	40	800	8	85	3500 3500
9	<b>4</b> 0	1000	8	90	4500
9	70	1000	ji o	90	4000

### Chestnut Poles

A. T. & T. and Western Union Specifications
"All poles shall be of sound, live white chestnut, squared at both ends, reasonably straight, well proportioned, from butt to top, peeled and knots trimmed to the surface of the pole."

Class	Length Feet	Circum. Top Inches	Circum. 6 Feet from Butt Inches	Weight	Class	Length Feet	Circum. Top Inches	Circum. 6 Feet from Butt Inches	Weight
D	20	20	24	400	D	45	20	43	2000
$\mathbf{C}$	20	20	27	500	li C	45	20	43	2000
В	20	22	31	600	B	45	. 22	47	2200
D	25	20	27	<b>500</b>	A	45	24	48	2500
$\mathbf{C}$	25	20	30	600	D	50	20	46	2400
${f B}$	25	22	33	700	C	50	20	46	2400
Α	25	24	36	1000	B	50	22	50	2700
D	30	20	31	900	A	50	24	51	3000
C	30	20	33	1000	C	55	20	49	3100
В	30	<b>22</b>	36	1100	B	55	22	53	3300
Α	30	24	40	1350	A	55	22	54	3300
$\mathbf{D}$	35	20	35	1200	B	60	22	56	3900
$\mathbf{C}$	35	20	36	1250	A	60	22	57	3900
В	35	22	40	1400	В	65	22	59	4500
A	35	24	43 .	1700	A	65	22	60	4500
$\mathbf{D}$	40	20	<b>3</b> 9	1600	B	70	22	62	5100
$\mathbf{C}$	40	20	40	1600	A	70	. 22	63	5100
В	40	22	43	1800	B	<b>7</b> 5	22	65	<b>5900</b>
A	40	24	45	2000	A	75	22	66	5900

Norm: The above specifications provide a stocky, high grade pole. We can also furnish chestnut poles under top dimension specification only. Digitized by GOOGIC

Prices on application.

## WOOD CROSSARMS Washington Fir or Yellow Pine



### Wood Crossarm STANDARD ARMS

Size  $3\frac{1}{4} \times 4\frac{1}{4}$  ins. Bored for  $1\frac{1}{2}$  in. Pins, or  $1-\frac{5}{8}$  in. Machine Bolt and  $2-\frac{3}{8}$  in. Brace Bolts

1	1	.   Standard Spacings			Washing	ton Fir	Yellow Pine		
Length Feet	Number of Pins	Center	Side	End	Brace	List No.	Wt. Lbs. Each	List No.	Wt. Lbs. Each
3 4 5 6 6 8 8 8 8 10	2 4 4 4 6 6 8 10 8 10	28 16 18 22 16 18 16 16 17 17 16	12 17 21 12 17½ 12 17½ 12 9¾ 15¾ 12 95%	4 4 4 4 4 4 4 4 4 4 37/8	25 28 28 32 32 32 32 32 42 42 42	740092 740093 740094 740095 740096 740097 740098 741146 740099 740100 741147	10.2 13.6 17 20.4 20.4 27.2 27.2 29.9 34 34 34	740112 740113 740114 740115 740116 740117 740118 741148 740119 740120 741149	13.2 17.6 22 26.4 26.4 35.2 35.2 37.4 44 44

PONY TELEPHONE ARMS

Size 23/4 x 33/4 ins. Bored for 11/4 in. Pins, 1-5/8 in. Machine Bolt and 2-3/8 in. Brace Bolts

7	1	Standard Spacings				Washing	ton Fir	Yellow Pine	
Length Inches	Number of Pins	Center   Side		End	Brace	List No.	Wt. Lbs. Each	List No.	Wt. Lbs. Each
24 30 36 42 62 82 102 120	2 2 2 4 6 8 10 12	17 23 29 16 16 16 16	91/2 93/4 93/4 93/4 95/8	3 ½ 3 ½ 3 ½ 3 ½ 3 ½ 3 ½ 3 ½ 3 ½ 4 4 3 ½	25 28 28 28 28 28 28 28	740101 740102 740103 740104 740106 740108 740110 740111	5 6.25 7.5 8.75 13 17 21.25 25	740122 740123 740124 740125 740126 740127 740129 740130	6.5 8.125 9.75 11.575 16.8 22.2 27.625 32.5

N. E. L. A. ARMS

Standard Sizes Adopted by the National Electric Light Association

Size  $3\frac{1}{2} \times 4\frac{1}{2}$  ins. Bored for  $1\frac{1}{2}$  in. Pins,  $1-\frac{5}{8}$  in. Machine Bolt and  $2-\frac{3}{8}$  in. Brace Bolts

6.13		Standard Spacings				Washing	ton Fir	Yellow Pine	
Feet	Number of Pins	Center	Side	End	Brace	List No.	Wt. Lbs. Each	List No.	Wt. Lbs. Each
3 ft. 2 ins. 5 ft. 7 ins. 8 ft. 9 ft. 2 ins.	6	30 30 30 30	14½ 14½ 14½ 12	4 4 4 4	32 38 38 38	740105 740107 740109 741119	123/3 221/3 32 363/8	741120 741121 741122 741123	15.83 27.92 40 45.83

RAILROAD ARMS Size 3 x  $4\frac{1}{4}$  ins. Bored for  $\frac{1}{2}$  in. Steel Pins,  $1-\frac{5}{8}$  in. Machine Bolt and  $2-\frac{3}{8}$  in. Brace Bolts

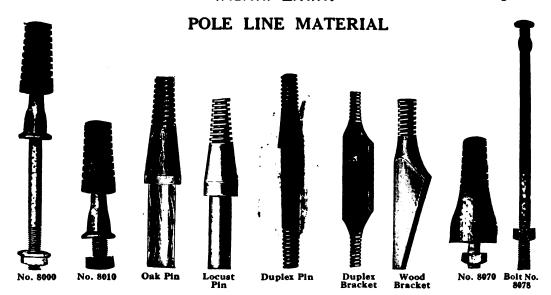
200	1 1	Sto	ndard Spac	ingg	1	Washing	ton Fir	Yellow	Pine
Length Feet	Number of Pins	Center	Side	End	Brace	List No.	Wt. Lbs. Each	List No.	Wt. Lbs. Each
6 6 8 8 8 10	6 6 8 8	22 16 18 16 17 <sup>1</sup> ⁄ <sub>2</sub>	21 12 17½ 12 12 15¾ 12	4 4 4 4 4	32 32 32 32 32 42 42	741662 741124 740128 741125 741663 741126	19.2 19.2 25.6 25.6 32 32	741127 741128 741129 741130 741131 741132	24.6 24.6 32.8 32.8 41 41

STANDARD POWER ARMS AND SPECIAL BORED ARMS

List No.	Size	Weight per Lineal Foot	List No.	Size	Weight per Lineal Foot
741133 741134 741135 741136 741137 741138 741139	31/4 x 41/4 3 x 41/4 23/4 x 33/4 31/2 x 41/2 31/2 x 43/4 31/2 x 5 33/4 x 43/4	3.4 lbs. 3.2 lbs. 2.5 lbs. 4 lbs. 4.2 lbs. 4.43 lbs. 4.5 lbs.	741140 741141 741142 741143 741144 741145	334 x 5 334 x 534 4 x 5 4 x 6 434 x 534 5 x 6	4.72 lbs. 5.4 lbs. 5 lbs. 6 lbs. 6.75 lbs. 7 4 lbs.

Prices on application.

\*List Price



### Standard Western Union Pins

u.	C-1	lvanized		Dista
not	Gai	IVanized	or	riain

List No. 8000 8005	Diameter Inches	Above Shoulder 41/4 41/4	Inches Below Shoulder 5 5	Weight Pounds 73. 110	—List Price Plain \$20.27 26.67	Galv. \$24.72 32.51
		Short Shank	Western			
8010	1/2	4	1	48	\$19.20	\$23.42
8011 8015	1/2 2/4	5 4	1	54 65	27.74 24.53	33.81 29.90
8016	518	5	ì	73	33.07	40.33

### Wood Pins

Size	Description	per 1000
1 1/2 x 8 ins.	Standard oak pin	\$15.00
115 x 9 ins.	Standard oak pin	
1 1/4 x 8 ins.	Standard locust pin	21.00
11/2 x 9 ins.	Standard locust pin	28.25
11/2 x 8 ins.	No. 2 grade locust pin	13 00
1 1 x 8 ins.	Standard locust pin	
11/4 x 9 ins.	Standard locust pin	31.50
1 1/2 x 9 ins.	Na O made leaves dis	
	No. 2 grade locust pin	23 10
$1\frac{1}{2}$ x 11 ins.	Standard locust pin	42.50
1½ x 12 ins.	Standard duplex locust pin	42.00
1½ x 12 ins.	Standard duplex locust pin	46.00
1 ¼ x 9 ins.	Standard transposition locust pin	28 90
11/4 x 9 ins.	Locust corner pin, without bolts, nuts and washers	45.00
	Brown duplex locust bracket	85.00
	Brown duplex oak bracket	73.00
116 x 2 x 16 ins.	Duplex oak bracket, painted or paraffined	42.50
	Oak bracket, painted or paraffined	
112 - 9 - 10 ins.	Oak bracket, painted or parameted	
179 X 2 X 12 1118.	Oak bracket, painted or paraffined	04.05
$1\frac{1}{2} \times 2\frac{1}{4} \times 12$ ins.	Oak bracket, painted or paraffined	24.35
2 x 2 ¼ x 12 ins.	Oak bracket, painted or paraffined	33.90
2 x 2½ x 12 ins.	Oak bracket, painted or paraffined	<b>35</b> . <b>25</b>

# Wood Top Pins with Steel Bolts Bolts Hot Galvanized

	Siz	e of Wood Top	. Ins —	THUC GAIVAIII	- Cu	Length of	Р	er 100
List	Diam.	Diam.	,	Size of	Bolt, Ins.	Bolt Below	Weight	List
No.	Top	Bottom	Length	Diameter	Length	Top, Ins.	Lbs.	Price Galv.
8070	1 -	176	416	16	516	1	52	\$40.00
8071	1	21/2	51/2	1,2	614	i ¼	60	41 68
8072	136	217	412	8,6	516	i	90	47 50
8073	13%	217	514	8.3	816	i13	115	50.83
8074	i °	17%	412	12	012	5	72	43.84
8075	ī	212	512	12	1013	51/	80	46.67
8076	ī	213	512	12	1112	61	88	47.84
8077	134	513	412	ś2	913	ğ/ <b>*</b>	135	55.84
8078	112	วีนั้	412	88	1013	Ä	160	60.00
8079	132	512	512	5.2	เกรี	м	165	62.50
8080	132	212	612	78	1212	274	190	70 00
8081	1.2	214	61/2	73	1272	Ž.	225	86.67
8082	182	237	â	73 87	12	` 7 (	250	93.33
5002 5001 - T	178	474		. 78	16 <sub>Dic</sub>	nitized by 🕻 💶 🔾	OUTE	30.00

Delivery F. O. B. factory. For warehouse deliveries write nearest house.

Line Construction Material

### Peirce Forged Steel Pins

		Long	Shank	Type	for Wo	od Cross	arms-	–With	ı 1 Incl	n Sprin	g Thre	ad	
		Above	Below	Total		*List	1		Above	Below	Total		*List
List	Diam.	Shoulder	Shoulder	Length	Weight	Price	List	Diam.	Shoulder	Shoulder	Length	Weight	Price
No.	Ins.	Ins.	Ins.	Ins.	Lbs.	per 100	No.	lns.	Ins.	Ins.	lns.	Lbs.	per 100
71	1/2	43/4	434	916	81	\$18.44	84	5/8	6	51/2	111/2	132	\$30.74
74	$\frac{1}{2}$	434	51/2	101/4	86	20.90	83	5/8	6	$6\frac{1}{2}$	$12^{1/2}$	140	31.98
80	5 8	43/4	434	$9\frac{1}{2}$	115	27.06	95	5/8 3/4	6	5	11	183	41.20
81	5/8	434	$5\frac{1}{2}$	$10\frac{1}{4}$	122	28.90	90	3/4	6	$5\frac{3}{4}$	$11\frac{3}{4}$	192	44.28
81A	5 8	434	$6\frac{1}{2}$	111/4	129	30.74	91	3/4	6	$6\frac{3}{4}$	$12\frac{3}{4}$	205	45.50
82	5/8	6	434	1034	126	29.52	90A	3/4 3/4 3/4	43/4	$5\frac{3}{4}$	$10\frac{1}{2}$	177	41.80
S	hort	Shank '	Type for	r Steel	Crossa	rms	1		Screw	Type f	or Pol	es, Etc.	
			nch Sp				l	v	Vith 1	inch Sp	ring T	hread	
72	1/2	43/4	11/4	6	54	\$18.06	73	1/2	43/4	3	$7\frac{3}{4}$	65	\$18.08
26	5.2	437	117	G	05	24 60	00	52	437	2	737	66	26 36

72	1/2	43/4	11/4	6	54	\$18.06	73	1/2	43/4	3	$7\frac{3}{4}$	65	\$18.08
86 87	5/8	43/4	11/4	6	85	24.60	88	$\frac{1}{2}$ $\frac{5}{8}$	43/4	3	73/4	88	<b>28.28</b>
87	5∕8	6	11/4	$7\frac{1}{4}$	96	26.44	89	5/8	$7\frac{1}{2}$	4	$11\frac{1}{2}$	120	31.98
93	3/4	6	11/2	71/2	123	35.66	94	3/4	6	4	10	130	<b>39.36</b>
93A	34	$4\frac{3}{4}$	$1\frac{1}{2}$	$6\frac{1}{4}$	107	33.20	94A	3/4 3/4	43/4	4	83/4	114	34.44
		•				Clama							

		uamp	, 1 1119				
List		Size of	Height		Std.	Wt. *I	List Price
No.	Size of Arms	Channel	Above Arm	Type of Thimble	Pkg.	per 100	per 100
4300	4 ins. x 5 ins. and smaller	Sheet	43/4 ins.	1 in. spring thread	200	67	<b>\$33</b> .60
4400	4 ins. x 5 ins. and smaller			1 in. spring thread	200	120	39.90
<b>44</b> 01	$3\frac{1}{2}$ ins. x $4\frac{1}{2}$ ins. and smaller	$\frac{3}{4}$ in.	43/4 ins.	1 in. spring thread	200	105	37.80



No. 897 No. 900 No. 912 No. 915 No. 916 No. 920 No. 921 No. 923 No. 924 No. 925 No. 934 No. 935 No. 1923 HIGH INSULATION PINS

List No.	14/		1		بد	1			†List 1	Price Ea	ch	1 0		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1972	ter	w	ve	Weigh 00		Japan	Finish	42,000	1				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Diame	Belo	Abou										
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					Sh	Each	Per 100	Each	Per 100	Each	Per 100	Each	Per 100	
935 Mall   1½   4   9   365   1.04   82.80   .78   62.10   1.47   117.50   1.50   12	900 Gray 912 D. F. 915 D. F. 916 Gray 920 Mall. 921 Mall. 923 Gray 924 Mall. 925 Mall.	11/4 11/2 11/2 11/2 11/2 11/4 11/2 11/2	5 4½ 5 3 <sup>3</sup> / <sub>8</sub> 3 <sup>7</sup> / <sub>8</sub> 3 <sup>7</sup> / <sub>8</sub> 4 3¼ 4	41/8 47/8 43/8 41/8 47/8 47/8 9 41/2 51/2	300 425 490 280 125 125 365 280 350	.45 1.15 1.30 .44 .29 .29 .69 .58	36.80 92.00 103.50 34.50 23.00 23.00 55.20 46.00 50.60	.49  .45 .32 .32 .72 .60 .65	39.10  36.80 25.30 25.30 57.50 48.30 52.90	.78  .72 .40 .40 1.19 .88 1.00	57.50 32.50 32.50 95.00 70.00 80.00	.81  .75 .44 .44 1.21 .90 1.03 .63	\$105.00 65.00  60.00 35.00 97.50 72.50 82.50 50.00	

Note: When ordering, specify finish desired and state whether with or without insertion.

\*Delivery F. O. B. Pittsburgh, Pa. †Delivery F. O. B. Factory, Dayton, Ono. For warehouse deliveries write nearest house.

Line Construction Material

### Western Electric

### POLE LINE MATERIAL

### All Metal "Lee" Pins

### WITH SEPARABLE THIMBLES

NOTE: "H" and "K" dimensions made to suit cross-arms. Please specify. "A" can be furnished ¾ inch for insulator having 1 inch pin hole. "D" can be furnished 3½ inch.

No. 03, 1% inch thimble always furnished unless otherwise specified. Thimbles are always furnished plain, as they are comented into the insulators.

On prices given bolts can be decreased or increased 1 inch in length without extra charge.

Bolt can be furnished either hot galvanized, threads cut and recut, or sherardized, as desired.

Bolts are always threaded  $2\frac{1}{2}$  inches at top and  $2\frac{1}{2}$  inches at bottom, unless otherwise specified, and are fitted with standard hot pressed square nuts and standard washers.

Where pin hole in insulators is 1 inch in diameter No. 01,  $\frac{3}{4}$  inch thimble will be furnished.

When ordering always specify the size cross-arm to be used.

The approximate weights given below are for complete pin, but when thimble is cemented in the insulator, which is usually the case, this weight is reduced by approximately 100 lbs. per 100 pins.

							j	Approx. Weight	*1	List Price per	100
List No.	A Inches	B Inches	C Inches	D Inches	E Inches	F-H Inches	N Inches	Weight per 100 in Lbs.	Complete Pin, Plain	Body and Bolt Galvanized	Plain Body and Galv. Bolt
9006 9007 9007 9007 9008 9008 9009 9010 9010 9011 9011 9012 9012 9013	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 3 4 5 3 5 5 6 7	614 712 712 712 814 814 9 10 10 11 11 11 13 13	333333333333333333333333333333333333333	3 \\ 4 \\ 2 \\ 4 \\ 2 \\ 4 \\ 2 \\ 5 \\ 4 \\ 6 \\ 7 \\ 7 \\ 8 \\ 8 \\ 10 \\ 10 \\ 11 \\	34 x 10 1/2 34 x 11 1/2 34 x 12 1/2 34 x 12 1/2 34 x 13 34 x 13 34 x 13 34 x 13 1/2 34 x 14 1/2 34 x 14 1/2 34 x 16 1/2 34 x 17 1/2 34 x 18 1/2	134 134 134 134 134 134 134 134 134 134	400 450 500 550 510 550 600 650 650 700 725 750 800 850 900	\$88.00 100.00 105.00 110.00 110.00 110.00 118.00 125.00 133.00 133.00 140.00 150.00 183.00	\$115.00 130.00 140.00 125.00 140.00 145.00 158.00 173.00 180.00 178.00 190.00 225.00 253.00	\$100.00 115.00 120.00 125.00 125.00 125.00 133.00 145.00 148.00 153.00 158.00 170.00 185.00

# H B K

All Metal "Lee" Pin

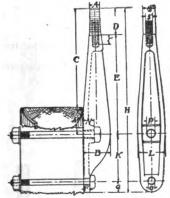
Porcelain Base Pin

### With Wood Thimbles

List No.	A Inches	B Inches	C Inches	D Inches	E Inches	F Inches	H Inches	Base No.	Weight per 100 Lbs.
101	1	21/4	41/2	21/4	21/4	1/2	91/6	6000	125
103	1	25%	51/2	213	3	1,6	1013	6001	165
105	136	214	41/2	21/4	21/4	5/8	101/2	6000	175
116	13/8	25%	51/2	21/2	3	5/8	1012	6001	200
118	13/8	31/2	9	3 -	6	5/9	15	6005	450
120	1	21/4	41/2	21/4	21/4	1/2	51/2	6001	100
122	13/8	31/2	8	3	5	5/8	14 -	6003	375
124	13/8	25/8	51/2	21/2	3	5/8	61/2	6001	175
125	13/8	31/2	8	3	5	5/8	9	6003	325
127	1	25%	51/2	21/2	3	1/2	61/2	6001	130
128	13/8	31/2	9	3	6	5/8	101/2	6005	410
130	13/8	41/4	101/2	41/2	6	3/4	17	6006	600
130A	13/8	. 3	101/2	41/2	6	3/4	17	6004	525
130B	13/8	31/2	101/2	41/2	6	3/4	17	6005	450
142	138	41/2	111/2	31/2	8	34	18	6007	800

### List Prices per 100

List No.	Approx. Weight per 100	List Pric	e per 100
	in Lbs.	Plain Bolt	Galv. Bolt
101	125	\$29.63	\$33.38
103	165	36.00	39.50
105	190	38.13	46.63
116	200	43.38	51.75
118	550	83.25	96.75
120	115	25.63	28.75
122	265	70.75	82.75
124	175	39.25	42.75
125	190	58.13	63.50
127	115	31.50	35.00
128	1 400	70.00	78.63



Pole Top Pin, Malleable Iron

### POLE TOP PINS

### Malleable Iron Pins-Separable Thimble

Made of malleable iron of channel design. The top of base or body is threaded and the thimble is attached by means of a 34 inch threaded stud, one end of which threads into the base and the other into the thimble. When both pins and insulators are furnished by us the thimbles are cemented into the insulators at the factory without extra charge. This adds one pound to weight of insulator. Thimbles are always furnished plain, not galvanized. Through bolts for fastening pins to pole are not included in price; these are standard machine bolts. The great convenience of having thimbles cemented into the insulator at the factory is worthy of special consideration. When extra insulators are wanted with thimbles cemented in, the price of thimbles plain is \$14.00 Insulators with 13/8 inch pin hole take 11/8 inch thimble and per 100.

1 inch pin hole takes ¾ inch thimble.

Note: Thimble No. 03, 1½ inch, furnished unless otherwise specified.

Thimbles always furnished plain.

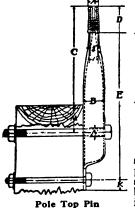
In ordering, always specify whether plain or galvanized wanted.

Price of through bolts not included in above, but we can quote on such bolts, either plain, galvanized, or sherardized. Please give length of through bolt required.

List No.	A inches	B inches	C inches	D inches	E inches	H inches	F inches	K inches	L inches	M inches	N inches	Oinches	P inches	Q
9550 9551 9552	1½8 1½8 1½8	$ \begin{array}{c c} \hline 2\frac{1}{4} \\ 2\frac{1}{2} \\ 2\frac{3}{4} \end{array} $	$\begin{array}{c} 6\frac{1}{4} \\ 7\frac{1}{2} \\ 9 \end{array}$	3 3 3	5½ 7 8¾	13 15 17½	1/2 5/8 5/8	3½ 4 4½	2½ 2½ 2¾ 2¾	2½ 2½ 2½ 2¾	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9 16 9 16 11 16	9 16 11 16 13	1 1 1½
9553 9554 9555	1½ 1½ 1½ 1½	3 31/4 31/2	11 13 15	3 3 3	11 13 15½	$\begin{vmatrix} 20\frac{1}{2} \\ 23\frac{1}{4} \\ 27 \end{vmatrix}$	3/4 3/4 3/4	51/4 6 7	$ \begin{array}{c c} 3 \\ 3 \frac{1}{4} \\ 3 \frac{1}{2} \end{array} $	3 3 1/2	$ \begin{array}{c c} 1\frac{1}{4} \\ 1\frac{1}{4} \\ 1\frac{1}{2} \end{array} $	11 16 11 16 11	13 16 13 16 13 16	$ \begin{array}{c c} 1\frac{1}{4} \\ 1\frac{1}{4} \\ 1\frac{1}{2} \end{array} $

Approximate

Wgt. per 100



9550 9551 9552 9553 9554 9555	500 lbs. 670 lbs. 700 lbs. 775 lbs. 875 lbs. 1300 lbs.	Prices on Application	Prices on Application
		-	

Plain

List Price per 100

Galvanized

### Pole Top Pins—Separable Thimble

These are hollow, being drawn from steel tube. A threaded ¾ inch stud is sweated into the top, and the thimble is screwed on this stud. Bottom part of pin is closed and securely welded; thus the lower bolt hole passes through one solid piece of flat metal, while the upper hole passes through a hollow tube. When both pins and insulators are furnished by us the thimbles are cemented into the insulators at the factory without extra charge. This adds one pound to weight of insulator. The great convenience of having thimbles cemented into the

insulators at the factory is worthy of special consideration. When extra insulators are wanted with thimbles cemented in, the price of thimbles plain is \$14.00 per 100. Insulators with 13% inch pin hole take 11% inch thimble and 1 inch pin hole takes ¾ inch thimble.

Note: Thimble No. 03, 1⅓ inch, furnished unless otherwise specified. Thimbles always furnished

In ordering, always specify whether plain or galvanized.

List No.

Price of through bolts not included in list, but we can quote on such bolts, either plain, galvanized, or sherardized. Please give length of through bolts required.

We can furnish all sizes of pipe pins for pole top or cross-arm, such as 2 inch, 2½ inch, and 3 inch stand-

ard and extra heavy. Prices made on application.

List	, A	В	The state of the s			List Price per 100						
No.	inches	inches	inches	inches	inches	inches	inches	100 lbs.	Upper	Lower	Plain	Galv'd
9600 9601 9602 9603 9604 9605	1½8 1½8 1½8 1½8 1½8 1½8	2 2 2 2 2 2	61/4 71/2 9 11 13 15	3 3 3 3 3	9 11 13¼ 16¼ 19 22⅓	1 1 11/4 11/4 11/5	21/4 21/2 23/4 3 3 31/6	460 475 580 670 760 880	1/2 x 11 5/8 x 111/2 5/8 x 111/2 5/8 x 111/2 5/8 x 111/2 3/4 x 111/5	1/2 x 9 1/2 x 9 1/2 x 9 1/2 x 9 1/2 x 9 1/4 x 9	\$176.00 184.00 208.00 240.00 266.66 304.00	\$192.00 202.66 224.00 266.66 301.32 344.00

Delivery F. O. B. Factory, East Liverpool, O. For warehouse deliveries write nearest house.

### Western Electric

### POLE TOP PINS

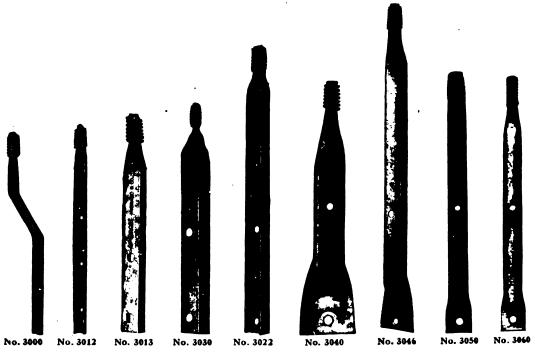
### HOT GALVANIZED

Pins Nos. 3000 to 3012 inclusive have  $\frac{1}{16}$  inch bolt holes, all other pins  $\frac{11}{16}$  inch holes.

The pipe pins are superceding cast and malleable iron pins for high voltage work, as they are lighter, stronger and cheaper.

The Presteel pins are useful on lighter lines, and for 6600 and 11,000 volt work the No. 3013 pin is par-

ticularly suitable.



### Pole Top Pins PIPE PINS

List	————Dimens	ions in Inc	hes				
Stock		-	Spacing	Style of			Price
No.	Size Steel	Length	Between Hole	в Тор	Wt. Lbs.	Each	Per 100
3050	11/4 pipe	18	8	13's in. spring	336	\$1.20	\$112.00
3052	1¼ pipe	24	8	13/8 in. spring	448	1.64	142.88
3054	11/4 pipe	36	10	13/8 in. spring	672	2.31	211.60
3060	1¼ pipe	18	8	$1\frac{7}{32}$ in. thimble	336	1.40	122.20
3062	114 pipe	24	8	$1\frac{7}{32}$ in. thimble	.448	1.75	152.28
3064	11/4 pipe	36	10	$1\frac{7}{32}$ in. thimble	672	2.40	210.56
			ANGLE	STEEL PINS			
3030	$2 \times 2 \times \frac{3}{16}$ angle	18	8	1 in. spring	366	\$1.18	<b>\$103.40</b>
3031	2 x 2 x 3 angle	24	8	1 in. spring	488	1.58	137.24
3033	$2 \times 2 \times \frac{3}{16}$ angle	36	10	1 in. spring	<b>7</b> 32	1.88	163.56
			PRES	TEEL PINS			
3040	10 gauge	18	8	1 in. spring thread	227	<b>\$</b> 0.97	\$84.60
3041	10 gauge	18	8	13% in. spring thread	230	. 97	84.60
3042	10 gauge	18	8	👬 in. thimble	227	1.08	94.00
3043	10 gauge	18	8	$1\frac{7}{32}$ in. thimble	230	1.08	94.00
3045	10 gauge	24	8	1 in spring thread	303	1.32	114.68
3046	10 gauge	24	8	13% in. spring thread	305	1.32	114.68
3047	10 gauge	24	8	🚻 in. thimble	303	1.43	124.08
3048	10 gauge	24	8	1 1/2 in. thimble	305	1.43	124.08
			CHA	NNEL PINS			
3000	1 x ½ channel	18	4	1	140	<b>\$</b> 0.69	<b>\$60</b> .16
3010	1 x $\frac{1}{2}$ channel	12	4	ī	74	.41	35.72
3012	1 x ½ channel	18	$ar{4}$	ī	140	.69	60.16
3013	$1\frac{1}{2} \times \frac{3}{4}$ channel	15	4	ī	163	. 52	45.12
3020	134 x 3/8 channel	18	8	$1\frac{3}{8}$	369	1.43	124.08
3022	134 x 5/8 channel	25	8 8	138	480	1.81	154.16
3023	1% x % channel	36	10	13%	725	_ T 2.50	109.04
	olivery F O B Fee	tom. Ditt		For marchouse deliverie	a write neer	oet house	

Delivery F. O. B. Factory. Pittsburgh, Pa. For warehouse deliveries write nearest house.

### FLETCHER PINS AND BRACKETS



902



2094, 2095 and 2096







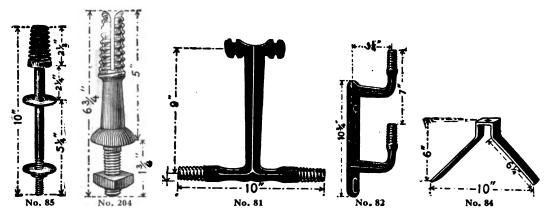


Pole Top Material

	<del>-</del>	CLinning		***	<b>n</b> .	
List	•	Shipping Weight				Insertion
No.	Description	per 100	Each	Per 100	Each	Per 100
901	Gray Iron Pole Top Thimble, for 1½ in. pin	350	\$0.69	\$55.30		
	Galvanized Gray Iron Pole Top Thimble, for 11/2		•	<b>V</b> ==. <b>U</b> 0		
	in. pin.		1.05	85.00		
902	Gray Iron Pole Top Thimble, for 11/4 in. pin		.69	55.30		
	Galvanized Gray Iron Pole Top Thimble, for 11/4					
	in. pin		1.05	85.00		
918	Gray Iron Pole Top Bracket		.58	46.00	\$0.60	\$48.30
918G	Galvanized Gray Iron Pole Top Bracket		.88	70.00	.90	72.50
994	Gray Iron Pole Top Bracket, for 8 in. pole, 1 in.					
	head		.87	69.00	.89	71.30
994G	Galvanized Gray Iron Pole Top Bracket, for 8 in.					
	pole, 1 in. head		1.50	120.00	1 54	123.50
995	Gray Iron Pole Top Bracket, for 6 in. pole, 1 in.					
	head		.87	69.00	.89	71.30
995G	Galvanized Gray Iron Pole Top Bracket, for 6 in.					
	pole, 1 in. head	525	1.25	100.00	1.45	115.00
996	Gray Iron Pole Top Bracket, for 7 in. pole, 1 in.					
	head	550	.87	69.00	.89	71.30
996G	Galvanized Gray Iron Pole Top Bracket, for 7 in.					
	pole, 1 in. head	575	1.45	115.00	1.46	117.50
997	Gray Iron Ridge Bracket, 8 in. extension	400	.70	<b>55.20</b>	.72	<b>57.5</b> 0
997G	Galvanized Gray Iron Ridge Bracket, 8 in. exten-	•				
	sion	420	1.12	90.00	1.15	92.50
998	Gray Iron Ridge Bracket, 4 in. extension	<b>2</b> 25	.37	29.90	.27	22.20
998G	Galvanized Gray Iron Ridge Bracket, 4 in. exten-	•				
	sion	235	.62	50.00	.66	<b>53</b> .76
2094	Gray Iron Pole Top Bracket, for 8 in. pole, 13% in.					
	head	700	1.06	<b>80.5</b> 0	1.03	82.80
2094G	Galvanized Gray Iron Pole Top Bracket, for 8 in.					
	pole, 1% in. head		1.75	140.00	1.77	142.50
2095	Gray Iron Pole Top Bracket, for 6 in. pole, 13% in.					
	head	600	1.00	80.50	1.03	82.80
<b>20</b> 95G	Galvanized Gray Iron Pole Top Bracket, for 6 in.					
	pole, 13% in. head		1.50	120.50	1.69	135.00
2096	Gray Iron Pole Top Bracket for 7 in. pole, 13% in.					
	head		1.06	80.50	1.03	82.80
<b>20</b> 96G	Galvanized Gray Iron Pole Top Bracket, for 7 in					
	pole, 13% in. head	680	1.68	135.00	1.71	137.50
1021	Gray Iron Ridge Bracket, japanned	80	.20	16.10	.21	18.40
	Galvanized Gray Iron Ridge Bracket	85 170	.28	22.80	.31	25.00
1059	Gray Iron Single Prong Bracket, japanned	178	.33	27.00	.37	29.90
1059G	Galvanized Gray Iron Single Prong Bracket	190	. 54	42.50	.56	45.CO

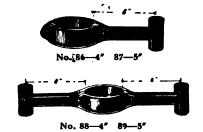
Note: When ordering, specify finish desired and state whether with or without insertion.
\*F. O. B. Dayton, O. For warehouse deliveries write nearest house ignized by

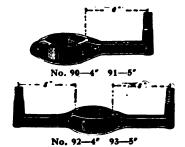
### FLETCHER IRON BRACKETS AND PINS



### Malleable Iron Pins and Brackets

		Shipping		—— <del>■</del> List	Price	
List	Mfr.	Weight	Without	Insertion	With I	nsertion
No.	No. Description	per 100	Each	Per 100	Each	Per 100
85	Malleable Iron Pin, with oak head, 1 in	. 90	<b>\$</b> 0.25	\$20.24		
85 <b>G</b>	Galvanized Iron Pin, with oak head, 1 in	. 90	.34	<b>27</b> . <b>50</b>		
204	Mal. Iron Pin, for bolting to iron plate, 1 in. head	. 120	.29	23.00	\$0.32	<b>\$25.30</b>
204G	Galv. Iron Pin, for bolting to iron plate, 1 in. head	. 120	. 50	40.00	. 53	42.50
81	Malleable Iron Ceiling Bracket, 1 in. head	. 275	.60	48.30	.65	52.90
81G	Galvanized Iron Ceiling Bracket, 1 in. head	. 275	.88	70.00	.86	69.00
82	Malleable Iron Bracket, 1 in. head	. 300	. 65	<b>52</b> .90	.72	57.50
82 <b>G</b>	Galvanized Iron Bracket, 1 in. head	. 300	.94	75.00	1.00	80.00
83	Malleable Iron Bracket, 1 in. head	. 425	1.10	87.40	1.18	94.30
83G	Galvanized Iron Bracket, 1 in head		1.40	112.50	1.53	122.88
84			.23	18.40		
84G	Galv. Iron Corner Bracket, for Nos. 82 and 83		.31	25.00	• • • • •	• • • • • •





# Gray Iron Brackets

For Iron Poles Shipping \*List Price With Insertion Without Insertion List Mír. Weight No. Per 100 No. Description Each Per 100 Each per 100 86 Gray Iron Bracket, 4 in. dia., single..... 750 \$1.10 \$87.40 86G 750 1.81 145.00 850 1.20 96.60 87 87G Galv. Iron Bracket, 5 in. dia., single..... 850 1.72 138.24 Gray Iron Bracket, 4 in. dia., double..... 126.50 88 1000 1.57 88G 1000 2.65212.50 1050 1.60 128.80 89 Galv. Iron Bracket, 5 in. dia., double.

Gray Iron Bracket, 4 in. dia., single, 1 in. head.

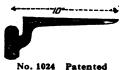
Galv. Iron Bracket, 4 in. dia., single, 1 in. head.

Gray Iron Bracket, 5 in. dia., single, 1 in. head. 89G 1050 2.70 215.00 \$85.10 700 90. 1.03 82.80 1.78 142.50 90G 700 140.00 94.30 800 1.15 92.00 160.00 157.50 2,00 91G 800 1.96 108, 10 900 1.40 103.50 1.35 92G 900 2.06 165.00 2.12 170.00119.00 Gray Iron Bracket, 5 in. dia., double, 1 in. head........... 1000 1.45 115.00 1.48 2,12 170.00 2.30 175.00 93G Galv. Iron Bracket, 5 in. dia., double, 1 in. head....... 1000

### FLETCHER IRON BRACKETS







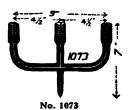
### Malleable Drive Brackets

		Shipping		*List	Price	
List		Weight	Without	Insertion	With I	nsertion
No.	Description	per 100	Each	Per 100	Each	Per 100
1022	Malleable Drive Bracket	90	<b>\$0.28</b>	\$23.00	\$0.31	<b>\$25.30</b>
1022G	Galvanized Malleable Drive Bracket	95	.40	<b>32.50</b>	.44	35.00
1023	Malleable Drive Bracket	90	. 28	<b>23.00</b>	.31	<b>25.30</b>
1023G	Galvanized Malleable Drive Bracket	95	.40	32.50	. 44	35. <b>0</b> 0
1024	Malleable Drive Bracket for 1½ in. pin	180	.45	36.80		
1024G	Galvanized Malleable Drive Bracket for 1½ in. pin	185	.65	<b>50.00</b>		









### Malleable Screw Pins and Brackets

		Saipping		+List	Price	
List		Weight	Without	Insertion	With In	sertion
No.	Description	per 100	Each	Per 100	Each	Per 100
1025	Malleable Screw Bracket	85	<b>\$0.28</b>	<b>\$23.00</b>	\$0.43	<b>\$25.30</b>
1025G	Galvanized Malleable Screw Bracket	90	.40	32.50	. 40	32.50
1026	Malleable Screw Pin		.23	18.40	.25	20.70
1026G	Galvanized Malleable Screw Pin	70	.31	<b>25.00</b>	. 34	27.50
1072	Two-wire Malleable Screw Bracket		.43	34.50	.48	39.10
1072G	Galvanized Two-wire Malleable Screw Bracket	125	. 56	45.00	.62	<b>50.00</b>
1073	Three-wire Malleable Screw Bracket	165	. <b>65</b>	52.90	.75	<b>59.80</b>
1073G	Galvanized Three-wire Malleable Screw Bracket	170	.88	70.00	.65	<b>52.50</b>







1100. 2027 2110,2020

No. 2017 Malleable Iron

### Corner Brackets

		Shipping		*List	Price	
List		Weight	Without	Insertion	With In	sertion
No.	Description	per 100	Each	Per 100	Each	Per 100
1027	Gray Iron Corner Bracket, japanned		<b>\$0</b> .65	<b>\$</b> 52.90	\$0.70	<b>\$</b> 55.20
1027G	Galvanized Gray Iron Corner Bracket	270	.94	<b>75.00</b>	.96	<b>77.50</b>
2027	Gray Iron Corner Bracket, for 1½ in. pin	310	.65	<b>5</b> 9.80		
2027G	Galv. Gray Iron Corner Bracket, for 1½ in. pin	325	1.30	95.00		
2028	Gray Iron Corner Bracket, for 11/4 in. pin	300	.75	<b>59.80</b>		
2028G	Galv. Gray Iron Corner Bracket, for 11/4 in. pin	315	1.30	95.00		
2017	Malleable Corner Bracket	205	.45	36.80	.48`	39.10
2017G	Galvanized Malleable Corner Bracket	215	.70	<b>55.00</b>	.71	57.50
			• • •		. 1	

Note: When ordering, specify finish desired and state whether with or without insertion.

\*F. O. B. Dayton, O. For warehouse deliveries write nearest house.

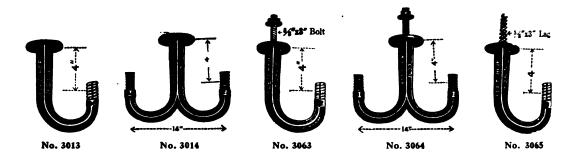
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No. 3165

### FLETCHER IRON BRACKETS

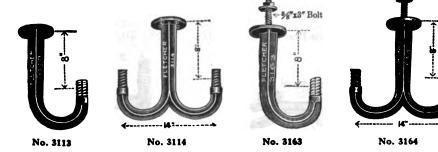
### Ceiling Brackets

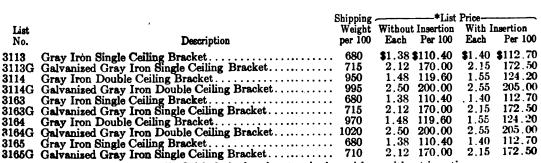
4 Inch Drop, 14 Inch Spread



		Shipping*List Price				
List				Insertion	With Ir	
No.	Description	per 100	Each	Per 100	Each	Per 100
3013	Gray Iron Single Ceiling Bracket	700	\$1.15	\$92.00	\$1.18	\$94.30
3013G	Galvanized Gray Iron Single Ceiling Bracket	735	1.71	137.50	1.75	140.00
3014	Gray Iron Double Ceiling Bracket	800	1.33	110.40	1.45	115.00
<b>3014G</b>	Galvanized Gray Iron Double Ceiling Bracket	840	1.83	150.00	1.94	155.00
3063	Gray Iron Single Ceiling Bracket		1.15	92.00	1.18	94.30
3063G	Galvanized Gray Iron Single Ceiling Bracket	735	1.71	137.50	1.75	140.00
3064	Gray Iron Double Ceiling Bracket	800	1.33	110.00	1.45	115.00
3064G	Galvanized Gray Iron Double Ceiling Bracket	840	1.83	150.00	1.94	155.00
3065	Gray Iron Single Ceiling Bracket		1.15	92.00	1.18	94.30
3065G			1.71	137.50	1.75	140.00
3066	Gray Iron Double Ceiling Bracket	800	1.33	110.00	1.45	115.00
3066G	Galvanized Gray Iron Double Ceiling Bracket		1.83	150.00	1.94	155. <b>00</b>

### 8 Inch Drop, 14 Inch Spread





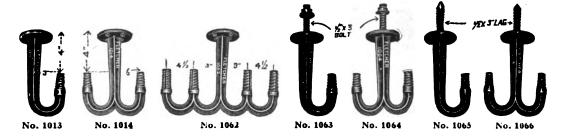
Note: When ordering, specify finish desired and state whether with or without insertion.

\*F. O. B. Dayton, O. For warehouse deliveries write nearest house.

### FLETCHER IRON BRACKETS

### Ceiling Brackets

4 Inch Drop, 6 Inch Spread

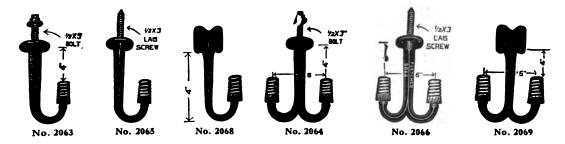


		Shipping		*List	Price-	
List		Weight	Without	Insertion	With 1	Insertion
No.	Description	per 100	Each	Per 100	Each	Per 100
1013	Gray Iron Single Ceiling Bracket, japanned	300	<b>\$</b> 0.57	\$46.00	\$0.60	<b>\$48.30</b>
1013G	Galvanized Gray Iron Single Ceiling Bracket	315	.87	70.00	.90	72.50
1014	Gray Iron Double Ceiling Bracket, japanned	350	.69	55.20	.75	<b>5</b> 9.80
1014G	Galvanized Gray Iron Double Ceiling Bracket	365	1.06	85.00	1.20	90.00
1062	Gray Iron Four-wire Ceiling Bracket, japanned	545	1.30	103.50	1.40	112.70
1062G	Galvanized Gray Iron Four-wire Ceiling Bracket	570	1.85	147.50	1.96	157.50
1063	Gray Iron Single Ceiling Bracket, japanned	310	. 57	46.00	.60	48.30
1063G	Galvanized Gray Iron Single Ceiling Bracket	325	.87	70.00	.90	72.50
1064	Gray Iron Double Ceiling Bracket	360	.69	55.20	.75	59.80
1064G	Galvanized Gray Iron Double Ceiling Bracket	375	1.06	85.00	1.20	90.00
1065	Gray Iron Single Ceiling Bracket, japanned	<b>27</b> 0	. 57	46.00	.60	48.30
1065G	Galvanized Gray Iron Single Ceiling Bracket	285	.87	70.00	.90	72.50
1066	Gray Iron Double Ceiling Bracket	360	.69	55.20	.75	<b>59.80</b>
1066G	Galvanized Gray Iron Double Ceiling Bracket	380	1.06	<b>85.00</b>	1.20	90.00

Note: When ordering, specify finish desired and state whether with or without insertion.

### 4 Inch Drop, 6 Inch Spread

### With Wood Thimbles



		Shipping		
List		Weight	*List	Price-
No.	Description	per 100	Each	Per 100
2063	Malleable Single Ceiling Bracket	250	\$0.71	\$57.50
2063G	Galvanized Malleable Single Ceiling Bracket	255	.88	70.00
2065	Malleable Single Ceiling Bracket	250	.71	57.50
2065G	Galvanized Malleable Single Ceiling Bracket	255	.88	70.00
2068	Malleable Single Pendant Bracket	275	.71	57.50
2068G	Galvanized Malleable Single Pendant Bracket	280	.88	70.00
2064	Malleable Double Ceiling Bracket	350	.75	62.10
2064G	Galvanized Malleable Double Ceiling Bracket	35 <b>5</b>	1.00	80.00
2066	Malleable Double Ceiling Bracket	350	.75	62.10
2066G	Galvanized Malleable Double Ceiling Bracket	355	1.00	80.00
2069	Malleable Double Pendant Bracket	340	.75	62.10
2069G	Galvanized Malleable Double Pendant Bracket	345	1.00	80.00
*F	O. B. Dayton, O. For warehouse deliveries write nearest house	by GO(	JYIC	

### FLETCHER IRON BRACKETS

### HIGH INSULATION BRACKETS

3 Inch Extension













No. 1018

No. 1028

No. 1029

No. 1058

		Shipping	pping ———*List Price——				
List		Weight	Without	Insertion	With I	nsertion	
No.	Description	per 100	Each	Per 100	Each	Per 100	
1018	Gray Iron Short Wall Bracket	210	<b>\$</b> 0.29	\$23.00	<b>\$</b> 0.32	<b>\$25.30</b>	
1018 <b>G</b>	Galvanized Gray Iron Short Wall Bracket	215	. 50	40.00	. 53	42.50	
1028	Gray Iron Curved-back Pole Bracket	210	.29	23.00	.32	25.30	
1028G	Galvanized Gray Iron Curved-back Pole Bracket	215	.50	40.00	. 53	42.50	
1019	Gray Iron Short Wall Bracket	215	.35	27.60	.37	29.90	
1019G	Galvanized Gray Iron Short Wall Bracket		. 56	45.00	.60	47.50	
1029	Gray Iron Heavy Wall Bracket	285	.52	41.40	. 54	43.70	
1029G	Galvanized Gray Iron Heavy Wall Bracket	290	.77	62.50	.82	65.00	
1058	Gray Iron Heavy Curved-back Pole Bracket	290	.52	41.40	.50	43.70	
1058G	Galv. Gray Iron Heavy Curved-back Pole Bracket	295	.84	67.50	.87	70.CO	









No. 2070

•					
•	Weight	Without	Insertion	With In	ertion
Description	per 100	Each	Per 100	Each	Per 100
		<b>\$</b> 0.23	\$18.40	<b>\$</b> 0.25	<b>\$20</b> .70
Galvanized Short Malleable Wall Bracket	90	.35	27.50	.38	<b>30</b> .00
Short Malleable Wall Bracket	100	.29	23.00	.32	<b>25</b> .30
Galvanized Short Malleable Wall Bracket	105	.46	32.50	.44	<b>35</b> . 60
Short Malleable Wall Bracket	85	.29	23.00	.32	25.30
Galvanized Short Malleable Wall Bracket	90	.47	37.50	. 50	40.00
Malleable Curved-back Pole Bracket	120	.32	25.30	.34	27.60
		.44	<b>35.00</b>	.47	37.50
	Short Malleable Wall Bracket Galvanized Short Malleable Wall Bracket Short Malleable Wall Bracket Galvanized Short Malleable Wall Bracket Short Malleable Wall Bracket Galvanized Short Malleable Wall Bracket Malleable Curved-back Pole Bracket	Description Weight per 100  Short Malleable Wall Bracket	Description   Description	Description   Description	Short Malleable Wall Bracket       85       \$0.23       \$18.40       \$0.25         Galvanized Short Malleable Wall Bracket       90       .35       27.50       .38         Short Malleable Wall Bracket       100       .29       23.00       .32         Galvanized Short Malleable Wall Bracket       105       .46       32.50       .44         Short Malleable Wall Bracket       85       .29       23.00       .32         Galvanized Short Malleable Wall Bracket       90       .47       .37.50       .50         Malleable Curved-back Pole Bracket       120       .32       .25.30       .34

NOTE: When ordering, specify finish desired and state whether with or without insertion.

### MALLEABLE IRON, WOOD THIMBLE







No. 1075

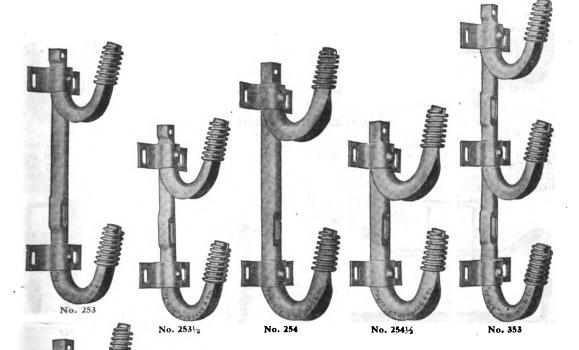


No. 3038

		Shipping		*List F	rice	
List				Insertion		
No.	Description			Per 100	Each	Per 100
1074	Malleable Wall Bracket, with paraffined oak head	85	\$0.29	\$23.00		
1074G	Galvanized Wall Bracket, with paraffined oak head	90	.40	32.50	• • •	
1075	Malleable Wall Bracket, with locust head	85	. 35	<b>27</b> .60		
1075G	Galvanized Wall Bracket, with locust head	90	. 47	37.50	• • •	
3038	Malleable Wall Bracket, with oak head	140	.35	27.60		
3038G	Galvanized Wall Bracket, with oak head	145	.50	40.00		
*I7	O R Dayton O Kar warehouse deliveries write neares	t kairea	hy (T	ogie		

For warehouse deliveries write nearest house. by





### Peirce Presteel Brackets

Peirce Presteel Brackets are hot galvanized and this coating preserves their original strength. They won't rust or break. Excessive strains may bend them but they will never break and let the wires down.

List		Extension	•	Size of	Standard	Weight	—List	Price-
No.	Style	Inches	Spacing	Hole	Bundle	per 100	Each	Per 100
136	Light	4	O	37	25	60	<b>\$0.50</b>	\$18.90
137	Heavy	412	O	3.8	25	100	.42	35.70
138	Heavy	$4\frac{1}{2}$	O´	3/8	25	100	.42	35.70
153	Light	4	0	32	<b>25</b> .	75	.25	21.00
154	Heavy	412	O	1 <sup>5</sup> 6	<b>25</b>	100	.37	31.50
253	Light	4	9	5 16	20	188	.64	54.60
2531/2	Light	4	$6\frac{1}{2}$	<u>5</u>	20	175	.60	52.50
254	Heavy	41/2	9	5 16	20	244	.86	73.50
2541/2	Heavy	41/20	$6\frac{1}{2}$	15 16	20	235	.80	69.30
353	Light	4	$6\frac{1}{2}$	<u>5</u> 16	20	275	. 93	79.80
354	Heavy	41/2	$6\frac{1}{2}$	<u>5</u>	20	350	1.20	102.90

Delivery F. O. B. Factory, Pittsburgh, Pa. For warehouse deliveries write nearest house.

No. 354

14-1

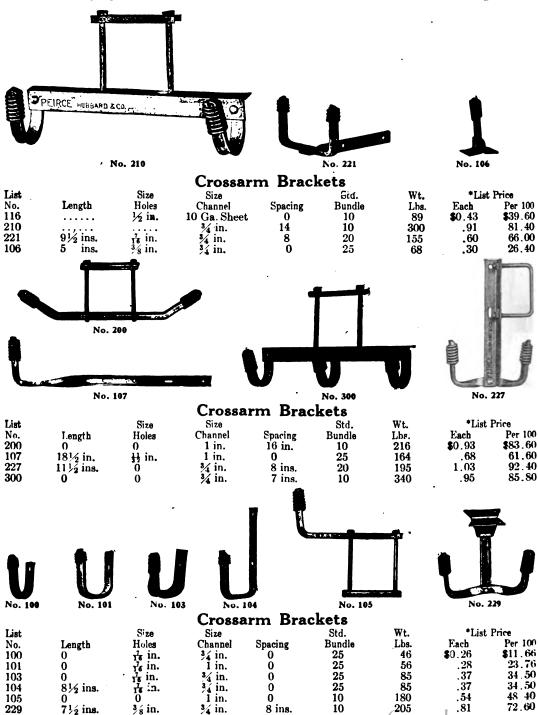
Line Construction Material

### PEIRCE CROSSARM BRACKETS

### Hot Galvanized

No. 116 bracket is for carrying two wires vertically from arm to arm.

The No. 107 bracket is used to run an extra wire on the end of a filled crossarm. Nos. 200, 221 and 300 are for taking off lamp or service connections. The No. 227 may be used as a "take off" bracket or for running an additional circuit below a filled crossarm. Nos. 100, 101, 103 and 105 are terminal brackets for running an additional circuit below a filled crossarm. Nos. 100, 101, 103 and 105 are terminal brackets for dead-ending circuits on crossarms, the first two for telephone wires only. No 104. is used by some companies to run jumper wires from end to end under arms. Nos. 106 and 229 are roof and ceiling brackets.



•F. O. B. Factory, Pittsburgh, Pa. For warehouse deliveries write nearest house.

### PEIRCE WALL BRACKETS Hot Galvanized











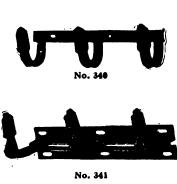
No. 148 No. 149 Adjustable

### Peirce Wall Brackets

List		Size	Size	Size	Wire	Std.	Wt., Lbs.	*List	Price
No.	Ext.	Base	Channel	Holes	Spacing	Bundle	per 100	Each	per 100
145	$3\frac{1}{2}$ ins.	$3 \times 2$ ins.	3⁄4 in.	5 in.	0	25	56	<b>\$</b> 0.23	\$19.80
146	$4\frac{1}{2}$ ins.	$3\frac{1}{2} \times 2$ ins.	1 in.	₩ in.	. 0	25	100	.42	35.70
147	9 ins.	$3\frac{1}{2} \times 2\frac{1}{2}$ ins.	1 in.	🏄 & 🔏 in.	0	25	141	. 59	<b>50.40</b>
148	6 ins.	$3\frac{1}{2} \times 4$ ins.	1 in.	3/8 in.	0	15	140	. <b>62</b>	<b>52.50</b>
149	6 ins.	$3\frac{1}{2} \times 4$ ins.,	1 in.	3⁄8 in.	0	15	140	. 66	<b>5</b> 6.70











No. 240

Peirce Wall Brackets

List		Size .	Size	Size	Wire	Std.	Wt., Lbs.	*List	Price
No.	Ext.	Base	Channel	Holes	Spacing	Bundle	per 100	Each	per 100
342	3 in <b>s.</b>	0	3/4 in.	5 in.	6½ ins.	20	261	<b>\$</b> 0.98	\$84.00
242	3 ins.	0	3/4 in.	16 in.	9 ins.	20	18 <b>6</b>	.66	56.70
340	3½ ins.	0	3/4 in.	🚠 in.	$6\frac{1}{2}$ ins.	10	220	.86	<b>73</b> . <b>50</b>
341	$4\frac{1}{2}$ ins.	3 ins.	I in.	3/8 in.	$6\frac{1}{2}$ ins.	10	460	1.60	136.50
150	$3\frac{1}{2}$ ins.	0	3/4 in.	5 in.	0	25	74	.32	<b>27.30</b>
151	$7\frac{1}{2}$ ins.	$3\frac{1}{2} \times 4$ ins.	Ì in.	3% in.	0	15	150	.59	<b>50.40</b>
240	$3\frac{1}{2}$ ins.	0	3⁄4 in.	🛧 in.	7 ins.	20	125	.56	48.30







No. 441

No. 241

No. 314

### Peirce Wall Brackets

List		Size	Size	Size	Wire	Std.	Wt., Lbs.	*Lis	t Price
No. 441 241	Ext 4½ ins. 4½ ins.	Base 3 ins. 3 ins.	Channel 1 in. 1 in.	Holes % in. % in.	Spacing 6½ ins. 7 ins.	Bundle 10 10	per 100 625 250	Each \$2.04 1.00	per 100 \$174.30 86.10

### Peirce Prussian Hook Brackets

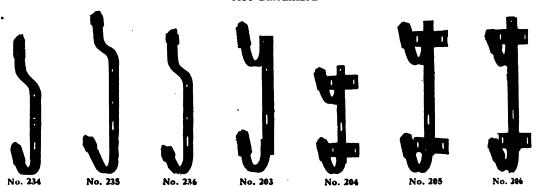
Is made of two sizes of square steel, ½ and ½ inch, and of ½ inch round, with Peirce steel spring threads for insulators with 1 inch diameter pin holes. The bracket is 6½ inches long, with a lag screw threaded end 3 inches long. inches long.

List	Size Steel	• .	Wt., Lbs.	*List 1	Price
No.	Inches	,	per 100	Each	per 100
314	5/8 Square		130	\$0.36	\$31.02
315	½ Square		105	.26	22.46
316	½ Round		90 Digitized by	Gaagle	18.18

\*Delivery F. O. B. Factory, Pittsburg, Pa. For warehouse deliveries write nearest house.

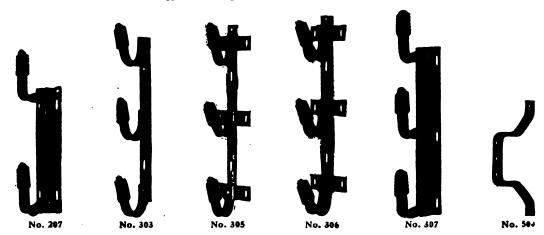
### PEIRCE WALL BRACKETS AND CORNER IRON

Hot Galvanized



### Peirce Wall Brackets

List		Size	Size	Width	Wire	Std.	Wt., Lbs.	List	Price-
No.	Ext.	Channel	Holes	Back	Spacing	Bundle	per 100	Each	Per 100
234	3½ ins.	3⁄4 in.	🔓 in.	0	8 ins.	25	90	\$0.42	<b>\$35</b> .70
235	$3\frac{1}{2}$ ins.	$\frac{3}{4}$ in.	🔓 in.	0	12 ins.	25	110	. 47	<b>39</b> ,90
<b>23</b> 6	$3\frac{1}{2}$ ins.	l in.	🛂 in.	0	10 ins.	25	143	· .49	42.00
203	3 ins.	¾ in.	🚠 in.	0	9 ins.	20	145	.57	<b>48.3</b> 0
204	3 ins.	¾ in.	16 in.	3½ ins.	$6\frac{1}{2}$ ins.	20	160	. 57	48.30
205	3 ins.	1 in.	🚠 in.	$3\frac{1}{2}$ ins.	9 ins.	20	175	.62	<b>52.5</b> 0
206	3 ins.	1 in.	🚡 in.	3½ ins.	9 ins.	20	225	.96	81.90



### Peirce Wall Brackets

List		Size	Size	Width	Wire	Std.	Wt., Lbs.	List	Price
No.	Ext.	Channel	Holes	Back	Spacing .	Bundle	per 100	Each	Per 100
207	$4\frac{1}{2}$ ins.	3⁄4 in.	3⁄8 in.	$2\frac{3}{8}$ ins.	9 ins.	10	250	\$0.91	\$77.70
303	3 ins.	34 in.	👬 in.	0	$6\frac{1}{2}$ ins.	20	225	.86	73.50
305	3 ins.	3⁄4 in.	👬 in.	3½ ins.	$6\frac{1}{2}$ ins.	20	260	.91	77.70
306	3 ins.	Î in.	🚠 in.	$3\frac{1}{2}$ ins.	$6\frac{1}{2}$ ins.	10	330	1.48	126.00
307	4½ ins.	3⁄4 in.	3/8 in.	23% ins.	6½ ins.	10	350	1.25	<b>107</b> .10

Nos. 234 and 235 brackets for telephone wires and pony insulators only. All other styles are for deepgrooved double petticoat insulators. They are made from hearth steel channel and angle which under severe strains will bend but will not break and let the wires down.

### Bracket Foot and Corner Iron

List		Size	Width	Spread	Std.	Wt., Lbs.	List	Price
No.	Ext.	Channel	Holes	of Base	Bundle	per 100	Each	Per 100
500	43/8 ins.	1 x 3/2 in.	🛧 in.	$10\frac{3}{8}$ ins.	20 ins.	85	<b>\$</b> 0.27	<b>\$25.20</b>

For use with Nos. 204, 205, 206, 305, 306 wall brackets. Makes brackets extend 8 inches from wall to get around obstructions such as rain conductors. May also be used on corners. Furnished complete with two stove bolts.

### FLETCHER IRON BRACKETS

### Wall Brackets

6 inch extension







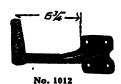


о.	1007	No.[20

		Shipping *List Price						
List				Insertion		sertion		
No.	Description	per 100	Each	Per 100	Each	Per 100		
1007	Gray Iron Wall Bracket, japanned		\$0.40	<b>\$32.20</b>	\$0,44	\$34.50		
1007G	Galvanized Gray Iron Wall Bracket	230	.62	<b>50.00</b>	.60	48.34		
2008	Gray Iron Wall Bracket, japanned	225	.45	36.80	.48	39.10		
2008G	Galvanized Gray Iron Wall Bracket	230	.70	<b>55.00</b>	.65	52.90		
2006	Gray Iron Wall Bracket, for 11/4 in. pin	280	.44	34.50				
2006G	Galvanized Gray Iron Wall Bracket, for 11/4 in. pin	285	.75	60.00				
2007	Gray Iron Wall Bracket, for 1½ in. pin	300	.44	34.50				
2007G		305	.75	60.00				
2010	Gray Iron Wall Bracket, for 1½ in. pin	300	.45	36.90				
2010G	Galvanized Gray Iron Wall Bracket, for 1½ in. pin	305	.75	60.00				









		Shipping						
List	•			Insertion				
No.	Description	per 100	Each	Per 100	Each	Per 100		
1038	Malleable Wall Bracket	180	<b>\$</b> 0.43	<b>\$34</b> .50	\$0.45	<b>\$36.80</b>		
1038G	Galvanized Malleable Wall Bracket	190	.62	<b>50.00</b>	. <b>6</b> 6	<b>52.50</b>		
1039	Malleable Wall Bracket	175	.48	<b>39.10</b>	.51	41.40		
1039G	Galvanized Malleable Wall Bracket	185	. 69	<b>55.00</b>	.73	<b>57.50</b>		
1011	Gray Iron Lateral Bracket, right	310	.51	41.40	.54	43.70		
1011G	Galvanized Gray Iron Lateral Bracket, right	325	.86	69.12	.88	<b>7</b> 0.00		
1012	Gray Iron Lateral Bracket, left	310	.51	41.40	. 54	43.70		
1012G	Galvanized Gray Iron Lateral Bracket, left	325	.86	<b>69.12</b>	.88	70.00		









No. 2011 No. 1008

	:	Shipping		——*List	Price	
List				Insertion		sertion.
No.	Description `	per 100	Each	Per 100	Each	Per 100
2011	Gray Iron Lateral Bracket, either left or right, for 11/2 in.					
	pin	400	<b>\$</b> 0.51	<b>\$</b> 41.40		
2011G	Galvanized Gray Iron Lateral Bracket, either left or	*				
202-	right, for $1\frac{1}{2}$ in. pin		.90	72.50		
1008	Gray Iron Roof Bracket, japanned		. 57	46.00	<b>\$</b> 0.60	<b>\$</b> 48 30
1008G	Galvanized Gray Iron Roof Bracket		. 96	77.50	1.00	80.00
1010	Gray Iron Cornice Bracket, japanned		.57	46.00	.60	48.30
1010G	Galvanized Gray Iron Cornice Bracket		.94	75.00	.97	77.50
1020	Gray Iron Cornice Bracket, for 1 % in, pin	425	.57	46.00		
1030G	Galvanized Gray Iron Cornice Bracket, for 11/2 in. pin	<b>44</b> 5	1.00	80.00	• • • • •	• • • • •

NOTE: When ordering, specify finish desired and state whether with or without insertion.

F. O. B. Dayton, O. For warehouse deliveries write nearest house. Digitized by

### FLETCHER IRON BRACKETS







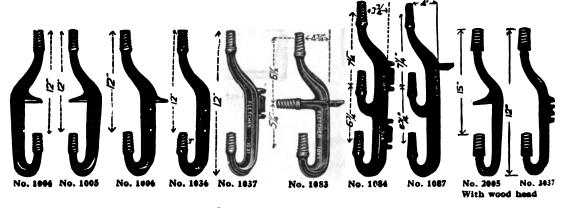


No. 2021

Wall Brackets

10 Inch Extension

		Shipping		*List Price-				
List		Weight	Without	t Insertion	With I	nsertion		
No.	Description	per 100		Per 100		Per 100		
2018	Gray Iron Wall Bracket, japanned	520	\$0.80	\$64.40	<b>\$0.82</b>	\$66.70		
2018G	Galvanized Gray Iron Wall Bracket	545	1.34	107.50	1.35	110.00		
2019	Gray Iron Wall Bracket, japanned	500	.80	64.40	.82	66.70		
2019G	Galvanized Gray Iron Wall Bracket	525	1.31	105.00	1.44	107 50		
2020	Gray Iron Wall Bracket, for 1½ in. pin	<b>540</b>	.80	64.40				
2020G	Galvanized Gray Iron Wall Bracket, for 1½ in. pin	565	1.35	110.00				
2021	Gray Iron Wall Bracket, for 11/2 in. pin	550	.80	64.40				
2021G	Galvanized Gray Iron Wall Bracket, for 1½ in. pin	575	1.40	112.50				



# Spreader Brackets

12 Inch Spread

				4711	ъ.	
	•	Shipping		*List	Price-	
List				Insertion		Insertion
No.	Description	per 100	Each	Per 100	Each	Per 100
1004	Gray Iron Spreader Bracket, left	525	<b>\$0.96</b>	\$77.00	<b>\$</b> 0.91	<b>\$7</b> 3.60
1004G	Galvanized Gray Iron Spreader Bracket, left	<b>550</b>	1.44	115.00	1.50	1 <b>2</b> 0.00
1005	Gray Iron Spreader Bracket, right	525	.96	77.00	.91	<b>73</b> .60
1005G	Galvanized Gray Iron Spreader Bracket, right	550	1.44	115.00	1.50	<b>120</b> .00
1006	Gray Iron Spreader Bracket, forward	600	. 96	77.00	.91	57.60
1006G	Galvanized Gray Iron Spreader Bracket, forward	630	1.44	115.00	1.50	<b>120</b> .00
1036	Gray Iron Spreader Bracket, forward		.96	77.00	.91	<b>57</b> .60
1036G	Galvanized Gray Iron Spreader Bracket, forward	485	1.35	110.00	1.44	115.00
1037	Gray Iron Spreader Bracket, forward		.96	77.00	.91	<b>57</b> .60
1037G	Galvanized Gray Iron Spreader Bracket forward		1.35	110.00	1.44	115.00
1083	Gray Iron Three-wire Spreader Bracket, forward		1.29	103.50	1.38	110.40
1083G	Galvanized Gray Iron Three-wire Spreader Bracket,					
	forward	815	2.08	167.50	2.19	175.00
1084	Gray Iron Three-wire Spreader Bracket, forward	780	1.29	103.50	1.38	110.40
1084G	Galvanized Gray Iron Three-wire Spreader Bracket,					
	forward	820	2.08	167.50	2.19	175.00
1087	Gray Iron Three-wire Spreader Bracket, forward		1.29	103.50	1.38	110.40
1087G	Galvanized Gray Iron Three-wire Spreader Bracket,	•				
	forward	840	2.36	187.50	2.44	195.00
2005	Malleable Spreader Bracket, right	360	.80	64.40		
3037	Malleable Spreader Bracket. forward		.71	57.50		
	When ordering energy finish desired and state wheth		ne witho	ut inserti	on.	

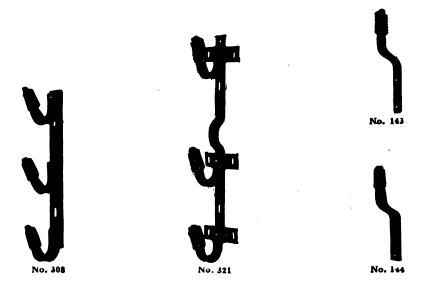
Norz: When ordering, specify timish desired and state whether with or without insertion.

\*F. O. B Dayton, O. For warehouse deliveries, write nearest house.

### PEIRCE POLE BRACKETS

### Hot Galvanized

The No. 308 is a pole bracket for secondary circuits for use instead of secondary racks. The No. 321 is used on poles in connection with spreader brackets on the arm for running wires from end to end of the arms. The hump fits over the head of the cross arm through bolts. The No. 109 is a pole bracket for heavy feeder wires.



### Pole Brackets

List	Size of			Size of	Std.	Wt. Lbs.	*Lia	t Price
No.	Channel	Extension	Spacing	Holes	Bundle	Per 100	Each	Per 100
308	1 in.	$3\frac{1}{2}$ ins.	$6\frac{1}{2}$ ins.	15 in.	20	ძ30	\$1.62	\$138.60
321	3⁄4 in.	$3\frac{1}{2}$ ins.	4½ ins.	16 in.	20	265	.90	77.70
143	3/4 in.	3 ins.	0	<del>5</del> in.	25	<b>5</b> 6	.18	16.16
144	1 in.	$3\frac{1}{2}$ ins.	0	📆 in.	25	85	.33	<b>28.36</b>







### Pole Brackets

List	Size of			Size of	Std.	Wt. Lbs.	*List P	rice
No.	Channel	Extension	Spacing	Holes	Bundle	Per 100	Each	Per 100
109	13/4 ins.	6 ins.	0	🔥 in.	10	302	\$1.47	\$124.00
142	10 ga. sheet	12 ins.	0	💏 in.	10	365	1.48	150.00
108	13/4 ins.	4 ins.	0	₩ in.	20	186	. C 0001e	70.00

### PEIRCE BRACKETS AND BREAK ARMS

### Hot Galvanized







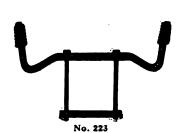


Peirce Spreader Brackets

Peirce Spreader Brackets fasten around the arm with the crossarm strap. The ends of straps fit in the long center slot of bracket.

List			Width	Size	Diam.	Std.	Wt.	*Lia	st Price-
No.	Ext.	Spacing	of Back	Channel	Side Holes	Bundle	Lbs.	Each	Per 100
201	$4\frac{1}{2}$ ins.	10 ins.	$2\frac{1}{2}$ ins.	1 in.	₁₄ in.	10	290	\$1.23	\$105.00
202	$4\frac{1}{2}$ ins.	12 ins.	$2\frac{1}{2}$ ins.	1 in.	in.	10	375	1.33	113.40
301	$4\frac{1}{2}$ ins.	6⅓ ins.	$2\frac{1}{2}$ ins.	1 in.	$\frac{7}{16}$ in.	10	390	1.75	149.10
302	$4\frac{1}{2}$ ins.	$6\frac{1}{2}$ ins.	$2\frac{1}{2}$ ins.	1 in.	16 in.	10	450	1.85	<b>157</b> .50







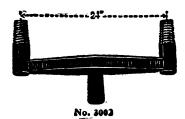
### Peirce Break Arms

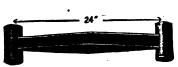
List		Size	Size	Std.	Wt.	*Li	st Price-
No.	Spacing	Channel	Bolt	Bundle	Lbs.	Each	Per 100
222	9 ins.	3/4 in.	3/8 in.	10	160	<b>\$</b> 0.76	<b>\$65</b> .10
223	12 ins.	1 in.	3/8 in.	10	240	. 93	79.80
224	12 ins.	1 in.	0	20	200	.93	79.80
225	10 ins.	1 in.	$\frac{1}{2}$ in.	10	<b>205</b> .	. 96	81.90

The Nos. 222, 223 and 225 break arms bolt around the arms and are adjustable to any size of arm between  $3\frac{1}{4} \times 4\frac{1}{4}$  ins. and  $4 \times 5$  ins. The No. 224 fits in  $1\frac{1}{2}$  in. pin hole.

\*F. O. B. Factory, Pittsburgh, Pa. For warehouse deliveries write nearest house.

### FLETCHER IRON BREAK-ARMS



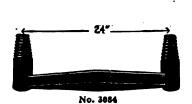


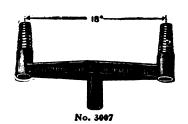


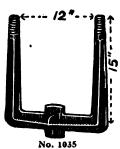
No. 3083

Iron Break-arms

				_				ce Each—
List				For		Weight	Without	With
No.		Spread	Stem	Pins	Finish	per 100	Insertion	Insertion
3002	Gray Iron Break-arm	18 ins.	11/2 ins.		Jap.	820	\$0.92	\$0.97
3002G	Gray Iron Break-arm				Galv.	860	1.58	1.63
<b>3</b> 083	Gray Iron Break-arm	24 ins.	Use ½ in. bolt	1½ ins.	Jap.	1040	1.27	
<b>3083G</b>	Gray Iron Break-arm	24 ins.	Use ½ in. bolt	$1\frac{1}{2}$ ins.	Galv.	1090	2.15	
3008	Gray Iron Break-arm	24 ins.	$1\frac{1}{2}$ ins.	$1\frac{1}{2}$ ins.	Jap.	1100	1.27	
3008G	Gray Iron Break-arm	24 ins.	$1\frac{1}{2}$ ins.	$1\frac{1}{2}$ ins.	Galv.	1155	2.15	





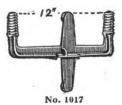


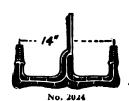
Iron Break-arms

						,	-*List Pri	ce Each—
List				For		Weight	Without	With
No.		Spread	Stem.	Pin	Finish	per 100	Insertion	Insertion
3084	Gray Iron Break-arm	24 ins.	Use ½ in. bolt		Jap.	1000	\$1.20	\$1.24
3084G	Gray Iron Break-arm	24 ins.	Use ½ in. bolt		Galv.	1050	2.13	2.68
3007	Gray Iron Break-arm					1080	1.20	1.24
3007G						1130		2.10
1035								1.08
1035G	Gray Iron Break-arm	12 ins.	15 in. arms		Galv.	<b>855</b>	1.58	1.63
3084 3084G 3007 3007G 1035	Gray Iron Break-arm	24 ins. 24 ins. 24 ins. 24 ins. 12 ins.	Use ½ in. bolt Use ½ in. bolt 1½ ins. 1½ ins. 15 in. arms		Jap. Galv. Jap. Galv. Jap.	1000 1050 1080	\$1.20 2.13	\$1 2 1 2 1







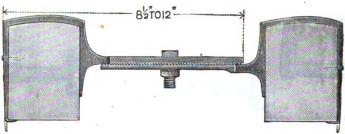


### Iron Break-arms

						—™List Pri	ce Each—
List					Weight	Without	With
No.		Spread		Finish	per 100	Insertion	Inse: tion
1015	Gray Iron Break-arm	12 ins.	4 in. arms	Jap.	305	<b>\$</b> 0.55	\$0.62
1015G	Gray Iron Break-arm	12 ins.	4 in. arms	Galv.	320	.80	1.62
1016	Gray Iron Reflector Break-arm	12 ins.	For ¾ in. pipe	Jap.	410	.64	.69
1016G	Gray Iron Reflector Break-arm	12 ins.	For ¾ in. pipe	Galv.	430	1.00	1.05
1017	Grav Iron Break-arm				420	.64	.69
1017G	Gray Iron Break-arm	12 ins.		Galv.	440	1.00	1.05
2024	Malleable Break-arm				450	.81	.85
2024G	Malleable Break-arm	14 ins.		DGalved b	y <b>470</b> C	)OQ182	1.23
						( )	

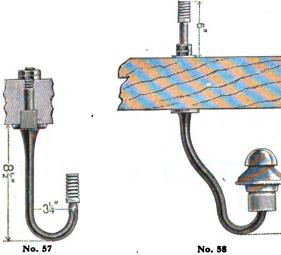
\*Delivery F. O. B. Dayton, O. For warehouse deliveries write nearest house.

# FLETCHER PHANTOM BRACKETS AND CROSSARM BRACE



No. 209 Cross Arm Brace

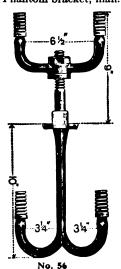
List No. 209 Fletcher Crossarm Brace \*List Price \$0.85 Crossarm brace, mall. iron, galvanized, with bolt and two nuts. \$0.85

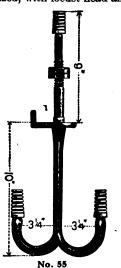




58 No. 58 Showing Insulator Placed

List No.	Fletcher Phantom Brackets	*List Price
57	Phantom bracket, mall. iron, galvanized, with locust head and lock nuts	<b>\$</b> 0.63
<b>58</b>	Phantom bracket, mall. iron, galvanized, with locust head and lock nuts	1.13





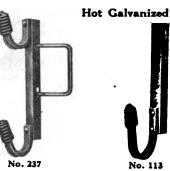


List No.	Fletcher Phantom Brackets	*List Price
56	Phantom bracket, mall. iron, galvanized, with locust head and lock nuts	\$1.78
55	Phantom bracket, mall, iron, galvanized, with locust head and lock nuts	1.08
70	Phantom bracket, mall. iron, galvanized, with locust head and lock nuts O.O.C	1.00
*De	elivery F. O. B. Dayton, O. For warehouse deliveries write nearest house.	

### TRANSPOSITION BRACKETS



No. 437





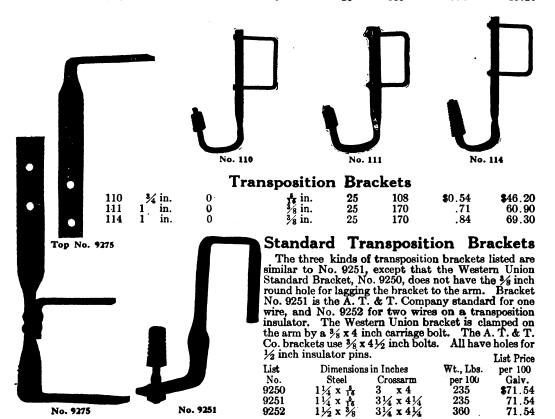




### Transposition Brackets

The brackets shown with "U" bolts are furnished with bolts bent for 31/4 x 4 inch arm unless otherwise specified, but can be furnished with bolts bent for any size up to The No. 115 Bracket bolts to the shank of a ½ inch steel pin below the arm and is held by the pin nut.

List	Size of	Size of	Size of	Std.	Wt. Lbs.	———List	Price-
No.	Channel	Back	U Bolt	Bundle	Per 100	Each	Per 100
437	3⁄4 in.	$1\frac{3}{4}$ ins.	3/8 iI1.	10	400	<b>\$</b> 1.72	\$147.00
237	$\frac{3}{4}$ in.	1 in.	3 g irı.	20	201 •	:84	71.40
113	3∕₄ in.	1¼ ins.	0	25	156	.62	52.50
112	3∕4 in.	1 in.	0	25	96	. 47	39.90
115	1 in.	0	0	25	135	. 54	46.20



The A. T. & T. Company standard transposition bracket for 4 wire transpositions with large, double petticoated porcelain insulators, such as are used on the transcontinental circuits, is fastened to the crossarm by two ½ x 4¾ inch machine bolts, spaced 2¾ inches apart, and has holes for ¾ inch pins. The price includes the two parts shown, the smaller of which projects above the arm, but no bolts or pins.

11/2 x 3/8 31/4 x 41/4 9275 685 \$215.34



### DISTRIBUTING RACKS AND KNOB FIXTURES Hot Galvanized

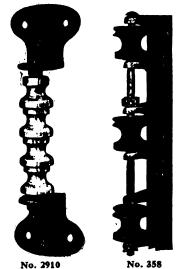




No. 2924



No. 2902









No. 351

Peirce Single Knob Fixtures

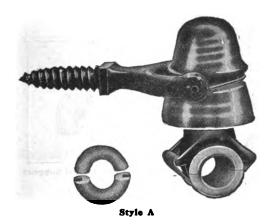
List	_	Wt. Lbs.	——List	Price
No.		per 100	Each	Per 100
2920	Single knob fixture	35	<b>\$</b> 0.17	<b>\$</b> 13.96
2922	Single knob fixture	48	.25	20.64
2924	Single knob fixture	40	. <b>22</b>	17.20

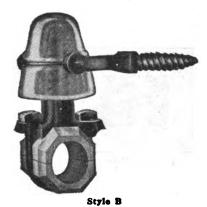
# Peirce Distributing Racks For Telephone Wires

List	Pair	-	Wt. Lbs.	List	Price-
No.	Wires	Frame	per 100	Each	Per 100
2900	4	Channel single	225	<b>\$</b> 1.04	<b>\$90.00</b>
2901	6	Channel single	300	1.37	118.00
2902	8	Channel single	475	1.61	147.60
2910	5	Malleable single	350	2.56	<b>221</b> . <b>40</b>
2911	8	Malleable single	400	3.18	<b>275.40</b>
2912	10	Malleable double	515	3.99	<b>345</b> . <b>6</b> 0
2913	16	Malleable double	615	5.62	486.00
All I	prices are for racks	complete with knobs.			

Peirce Secondry Racks										
						Vithout Inst		'ـــــــــــــــــــــــــــــــــــــ	With Insul	ators
List	No. of	Wire	Overall	Std.			Price			Price-
No.	Live Wires	Spacing	Length	Bundle	Wt. Lbs.	Each	Per 100	Wt. Lbs.	Each	Per 100
250	2	4 ins.	$8\frac{3}{4}$ ins.	10	360	<b>\$</b> 1.34	\$112.00	560	\$1.71	<b>\$144.00</b>
350	3	4 ins.	$12\frac{3}{4}$ ins.	10	500	1.79	150.00	800	2.36	198.00
450	4	4 ins.	$16\frac{3}{4}$ ins.	10	620	2.28	192.00	1020	3.05	<b>256</b> .00
540	5	4 ins.	$20\frac{3}{4}$ ins.	10	740	2.74	230.00	1240	3.69	310.00
258	2	8 ins.	$12\frac{3}{4}$ ins.	10	500	1.79	150.00	700	2.17	182.00
358	3	8 ins.	$20\frac{3}{4}$ ins.	10	740	2.74	<b>230</b> .00	1040	2.69	<b>278</b> .00
	•		Peirce	Exte	nsion	Secon	dary Ra	cks		
251	2	4 ins.	$8\frac{3}{4}$ ins.	5	735	\$2.62	\$220.00	935	\$3.00	\$252.00
351	3	4 ins.	$12\frac{3}{4}$ ins.	5	1100	3.57	300.00	1400	4.14	348.00
451	4	4 ins.	$16\frac{3}{4}$ ins.	5 5 5 5	1245	4.43	372.00	1645	5.19	436.00
541	5	4 ins.	$20\frac{3}{4}$ ins.	5	1500	5.28	444.00	2000	6.24	<b>524.00</b>
259	2 3	8 ins.	$12\frac{3}{4}$ ins.	5	1100	3.57	300.00	1200	3.95	332.00
359	3	8 ins.	$20\frac{3}{4}$ ins.	5	1500	5.28	444.00	1800	5.85	492.00
			Insulato	rs for	Peiro	e Seco	ndary I			
List								Wt. Lbs.	Lis	t Price
No-								per 100	Each	Per 100
355	Standard	d single	groove					100	<b>\$</b> 1.90	\$16.00
<b>356</b>	Special d	louble g	roove					11,5	2,14	<b>18.00</b>
	356 Special double groove									

### INSULATOR SPECIALTIES





### Holmes Tree Insulators

These insulators are made of malleable iron and furnished with double petticoat glass insulator. They are always in an upright position, regardless of the slant of the tree. The current cannot leak even if wire is bare. They can be quickly applied to tree without cutting the wire.

List No.	Style	*List Pr	ice Each
741713	A	Holmes Tree Insulator, ¾ in. hole, will take wire up to 2-0	<b>\$</b> 0.73
741714	В	Holmes Tree Insulator, 1 in. hole, will take wire up to and including 4-0	1.17



### Ajax Insulator Bracket

The new Ajax Insulator Bracket is made of malleable iron with lag screw in one piece and the insulator pin is made of a soft tough lead composition.

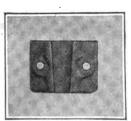
The comparatively soft insulator pin eliminates cracking the glass or porcelain insulator which is screwed over it. Where iron pins are used the expansion and contraction of the metal often results in cracking the glass or porcelain.

The lag screw used without expansion shield is adapted for use in wood house-walls, trees, poles, etc. and with the addition of a Diamond N Two-part Expansion Shield it makes a most secure attachment to brick, stone or concrete walls. Furnished in two diameters, ½ inch and 5% inch.

### List per 100

	Galvanized		- Blac	k
Diameter of Screw	Without Shield	With Shield	Without Shield	With Shield
½ in.	<b>\$45</b> .60	<b>\$</b> 56.40	\$39.00	\$48.00
5% in.	54.00	<b>66.0</b> 0	46.20	<b>5</b> 6.40
*Delivery F. O	. B. Factory, Newton, Mas	s. For warehou	ise deliveries write neare	st house.
· ·		<b>26-4</b>		nstruction Material

### MAST ARM AND BRACKETS

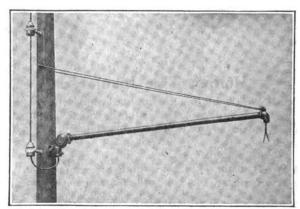








Street Hood Support



Mast Arm with Knuckle Joint

### Knuckle Joint Incandescent Mast Arm

This unique mast arm having knuckle joint allows it to be set level with the pole out of plumb. Pole Plate is of malleable iron drilled for two 5% inch lag bolts, 3½ inches apart horizontally, making a

solid support.

Knuckle Joint is of malleable iron and slides readily into dovetail slot of the pole plate. It is made to clamp 1½ inch standard pipe. No set screws are used.

Street Hood Support is of malleable iron and has an eye supporting ring with ½ inch bolt for two standard pipe size, for % inch rods. One end threaded for 1¼ inch mast arm, the other end is 1¼ inch standard pipe size, for high candle power street hood. Finished in black rubber paint.

Supporting Rods have an eye at either end and may be furnished either hot galvanized, lomanized lack. These are lagged direct to either side of the pole. The standard sizes carried in stock are 11 feet or black. 8 inches for 10 foot mast arm. -List Price Each-List No. , Lots of

Lots of 1 to 100 100 or More Knuckle joint incandescent mast arm complete (less pipe) includes Pkg. 1 knuckle joint with pole plate, 1 incandescent fitting with eye supporting ring,  $2\frac{3}{8}$  inch block supporting rods, 11 ft. 8 ins. long with eye..... 10 \$6.30









13-14 in. Bracket

\_\_I :- Dries Fach

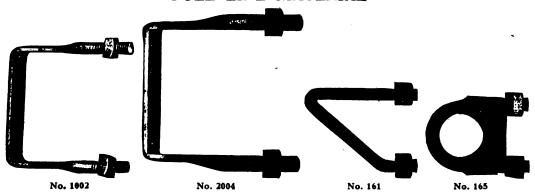
\$5.86

Standard 5 in. Bracket

PL 3 in. Bracket' FL 3 in. Bracket PI. Dunley Insulated Brackets

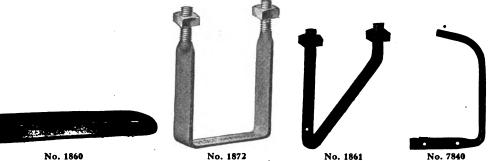
	1 D Dupick Insulated Didences	TISE I	UCE DECH.
	Opening in Porcelain 🛧 x 5% Inch Oval Std.	Lots of	Lots of
List No.	Pkg.	10	250 or More
PL-5 in.	Standard Duplex Insulated Bracket	\$1.02	<b>\$</b> 0.96
PL-3 in.	Duplex Insulated Bracket	.86	.82
FL-3 in.	Duplex Insulated Bracket, with ½ inch machine bolt and nut in		
	place of lag screw	1.02	.96
13-14	Duplex Insulated Bracket, supports wire along 1½ inch mast arm. 100	98	.94
Delive	ry F. O. B. Factory, Elizabeth, N. J. For warehouse deliveries write nea	rest house	•

### POLE LINE MATERIAL



### Peirce Crossarm Straps and Clamps Hot Galvanized

		D	imensions in Incl	nes			
List			Weight	Price	e List——		
No.	Description	Size Arm	Flat	Pounds	Each	Per 100	
1001	Strap	$3\frac{1}{4} \times 4\frac{1}{4}$	$\frac{5}{12} \times 1\frac{1}{8}$	1/2	91	<b>\$</b> 0.23	\$22.06
1002	Strap	$3\frac{1}{2} \times 4\frac{1}{2}$	$\frac{5}{32} \times 1\frac{1}{8}$	$\frac{1}{2}$	102	.24	23.10
1003	Strap	$3\frac{3}{4} \times 4\frac{3}{4}$	$\frac{1}{32} \times 1\frac{1}{8}$	1/2	113	. <b>25</b>	24.16
1004	Strap	4 x 5	$\frac{5}{12} \times 1\frac{1}{8}$	$\frac{1}{2}$	126	.26	<b>25.20</b>
List			Size of C	rossarm		List	Price
No.	Description		Inches		Weight, Lbs.	Each	Per 100
2001	Heavy Crossarm Strap		31/4 x 41/4 Wood Arm		142	<b>\$</b> 0.30	<b>\$29.56</b>
2002	Heavy Crossarm Strap		$3\frac{1}{2} \times 4\frac{1}{2}$	Wood Arm	148	.31	30.34
2003	Heavy Crossarm Strap		$3\frac{3}{4} \times 4\frac{3}{4}$	Wood Arm	154	33	<b>32.12</b>
2004		ssarm Strap	4 x 5	Wood Arm	160	.36	<b>33.90</b>
159		e Clamp	$2\frac{1}{2} \times 2\frac{1}{2}$	Notched Angle	90	.14	13.68
160	Angle Clamp		3 x 2 3 x 3	Notched Angle	90	.14	13.68
161		Angle Clamp		Notched Angle	100	. 15	14.28
162		Angle Clamp		Notched Angle	115	.16	<b>15.46</b>
165	Pipe	Clamp	$1\frac{1}{4}$ to 2	Standard Pipe	160	.25	23.80



No. 1860 No. 1872 PEIRCE DOUBLE CLEVISES FOR CROSSARMS Hot Galvanized

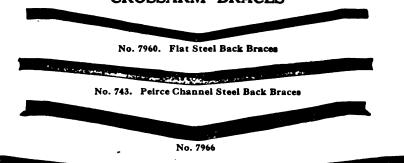
The Double Clevis consists of a clevis plate and a crossarm clamp or strap. -List Price-List Size Arm, Inches Wt., Lbs. Each Per 100 No. 1860 Standard Clevis Plate All Arms 120 **\$**0.29 **\$26.60** Angle Clamp only 70 1861 х 3 Angle .12 10.46 Angle Clamp only Crossarm Strap only 3½ x 3½ 3¼ x 4¼ Angle Wood 76 1862 . 14 12.36 20.90 22.80 1871 97 .23 Crossarm Strap only  $3\frac{1}{2} \times 4\frac{1}{2}$ Wood 1872 108 Crossarm Strap only  $3\frac{3}{4} \times 4\frac{3}{4}$ Wood 25.661873 119 1874 Crossarm Strap only x 5 Wood 132 28.50

# HUBBARD GUARD IRONS Hot Galvanized

The		stened to the arm by	two wood screws.
List ' ~	Di	mensions in Inches	
No.	Diameter Prince of the Prince	Width	Height
7840	3⁄2	5	. 71/4
7841	5/8	5	71/4
			15

Per 100	
Weight, Lbs.	List Price
85	Prices on
125	Application
Digitized by CTOOQ	Motorial

### CROSSARM BRACES



No. 7969. Angle Steel Back Braces

### Flat Steel Back Braces

These braces are used for back bracing crossarms at corners and terminal poles, and in many case eliminate the necessity for double arming. They are made of three shapes of open hearth steel: flat, angle and channel, and are fastened to the crossarm by ½ inch carriage bolts, and to the pole by the 5% inch crossarm through bolt. The Peirce Channel Braces are stiffer than any other form of brace of the same weight. They are provided with two prongs at each bolt hole, which bite into the arm and pole, and prevent any lost motion between the arm, brace and bolt.

Nos. 79	67 and 7969 are the A.	T. & T. Co. standard braces.		
List No.	Size Steel Inches	Length Feet	Weight Pounds	List Price Each
7960	$1\frac{1}{2} \times \frac{3}{8}$	6 ft.	1150	\$1.96

### Angle Steel Back Braces

List	Size Steel		Weight	List Price	List	Size Steel		Weight	List Price
No.	Inches .	Length	Lbs.	Each	No.	Inches	Length	Lbs.	Each
740	1 x ½ x ½	5 ft.	410	\$0.86	746	134 x 54 x 1/2	4 ft.	420	\$1.04
741	1 x ½ x ½	6 ft.	510	1.06	7964	11/2 x 11/2 x 1/2	4 ft.	512	1.19
742	134 x 54 x 34	5 ft.	670	1.20	7965	136 x 1 1/4 x 3/4	5 ft.	635	1.40
743	1 1/4 x 1/4 x 1/4	6 ft.	820	1.38	7966	132 x 1 2 x 🛣	6 ft.	1100	2.04
744	134 x 54 x 34	8 ft.	1060	1.84	7967	134 x 134 x 🛣	7 ft. 10 ins.	1650	1.68
745	1% x % x 1/8	9 ft. 2 ins.	1250	2.14	7969	1% x 1% x %	9 ft. 2 ins.	1935	3.55

National Electric Light Association Standard Brace, No. 8128

No. 7994 Vertical Brace

### Flat Crossarm Braces

The standard crossarm brace of the National Electric Light Association is the 1/4 x 11/4 inch brace, 28 inches long over all, with one 18 inch hole and one 18 inch hole, the centers of which are one inch from the ends of the brace. This arrangement of holes is also standard with the A. T. & T. Company and the Western Union Telegraph Company, and will be furnished on all orders unless otherwise specified, although the Railway Signal Association brace, with  $\frac{1}{2}$  and  $\frac{5}{6}$  inch holes similarly arranged, or any other desired combination, can be supplied. Hot galvanized or plain.

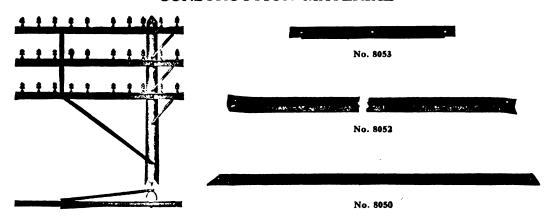
		1 1	INCH X 18 INCH BI	RACES		
List No. 7920 7922	Length Inches 20 22	Weight Lbs. per 1000 1000 1100	List Price Galv. per 100 \$26.00 7924	Length Inches 24	Weight Lbs. per 1000 1200	List Price Galv. per 100 \$31.20
		1.1	INCH X 7 INCH B	RACES		•
8020 8022 8024	20 22 24	1420 1560 1700	\$32.80   8026 36.00   8028 39.20   8030	26 28 30	1840 1980 2120	\$42.00 45.20 48.80
		11/	INCH X 1/4 INCH B	RACES		
8120 8122 8124	20 22 24	1670 1835 2000	\$38.40   8126 42.40   8128 46.00   8130	26 28 30	2165 2335 2500	\$49.60 53.60 57.20

### VERTICAL BRACES

	————Dimensi	Per 100					
List		Length		No. of	Weight,		Price
No.	Size Angle	Over All	Spacing	Arms	Lbs.	Plain	Galv.
7990	$1\frac{1}{2} \times 1\frac{1}{2} \times \frac{3}{16}$	16	12	2	240	<b>\$48.30</b>	<b>\$</b> 66.19
7991	$1\frac{1}{2} \times 1\frac{1}{2} \times \frac{3}{16}$	28	12	3	420	93.10	100.84
7992	$1\frac{1}{2} \times 1\frac{1}{2} \times \frac{3}{16}$	40	12	4	600	136.00	147.32
7993	$134 \times 134 \times 134$	22	18	2	385	84.00	90.98
7994	$1\frac{3}{4} \times 1\frac{3}{4} \times \frac{3}{16}$	40	18	3	700	158.7 <b>4</b>	158.62
7995	$1\frac{3}{4} \times 1\frac{3}{4} \times \frac{3}{16}$	58	18 .	4	1015	206.88	224.10

Delivery F. O. B. Pittsburgh, Pa. For warehouse deliveries write nearest house.

## CONSTRUCTION MATERIAL



#### Extension Fixtures

Where it is necessary to clear buildings or trees without the use of high poles, extension fixtures of the A. T. & T. Co. design furnish a very rigid and economical construction. They are designed for supporting either 6 or 10 pin arms, No. 8051 back brace being used with 6, and No. 8052 with 10 pin arms. The vertical brace shown is designed for 3 arms spaced 12 inches apart, or 2 arms on 24 inch centers, additional arms being cared for by placing other vertical braces in "series" with the first. All braces are made of heavy open hearth steel angles, the diagonal braces being  $2 \times 2 \times \frac{1}{16}$  inch and the other braces  $2 \times 2 \times \frac{1}{24}$  inch angle. Prices do not include bolts. Hot galvanized.

				Per 100	
List		Length	Weight	List P	
No.	Style	Inches	Lbs.	Plain	Galv.
8050	Diagonal	831/4	1750	\$248.40	\$330.52
8051	Back	50 12 62 14 28	1350	190.80	<b>25</b> 5.40
8052	Back	621/2	1665	231.67	306.00
8053	Vertical	28	745	103.66	155.42
	_			X.	
				•	
		No.	7984		
			<u> </u>		
		and the first three three	THE PERSON NAMED IN TAXABLE PARTY	de State Contract	
			<b>4</b>		
		No	8084		

# Angle Steel Alley Arm Braces HOT GALVANIZED OR PLAIN

Alley or side arm braces made of steel angles are used extensively on distribution lines in alleys. Where more than one crossarm is supported, vertical braces are used in addition.

Two types of braces are made, with forged ends and with straight ends, each being supplied with or without steps for the linemen. The forged end brace is fastened by lag screws to the street side of the pole and by a carriage bolt to the side of the crossarm, while the plain end brace is lagged to the face of the pole and bolted to the side of the arm.

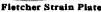
The braces listed cover the best modern practice, but prices will be quoted on any special type or size of brace upon receipt of drawings.

#### FORGED END BRACES

		1	Without Steps	•••	ł	With St		
Leng	th Sise Angle	List Wei	ght ——Per List F	Prices		Veight	List Pr	
Feet	Inches	No. Lbs		Galv. \$162.04	No. 7980	Lbs. 775 \$	Plain 195.78	Galv. \$230.62
5	1½ x 1½ x 🛧	7971 101	5 197.56	220.12	7981	1090	244.92	288.80
5 6 7 7	1½ x 1½ x & 1½ x 1½ x &	7972 119 7973 137		249.88 285.32	7982 7983		269.92 298.54	319.10 354.52
	1¾ x 1¾ x 🖟	7974 161 7975 352		330.40 120.00	7984 7985	1690 `	339 . 14 675 . 34	399.74 798.00
10	2 x 2 x 1/4	1 1910 - 802			1 1800	3000	0/0.34	798.00
			PLAIN END	BRACES				
5 5	11/4 x 11/4 x 1/4	8070 61   8071 90		\$106.59 156.00	8080			\$131.96
5	11/2 x 11/2 x 1/4 11/2 x 11/2 x 1/4	8072 108	0 158.40	187.20	8081 8082	1155	190.68 217.04	225.34 256.54
6	113 x 113 x 1 134 x 134 x 1	8073 126 8074 148		219.90 256.54	8083 8084		248. ∌8 278. 48	287.06 325.88
10	2 x 2 x 14	8075 320	0 468.66	555.34	8085	3275	536 00	633.32
	Delivery F. O. B. P.	ittsburgh, Pa.	For warehouse	deliveries	write nearest	house.	310	

## CONSTRUCTION MATERIAL







No. 7575



No. 7570

# Strain Plate

List		Q:	Weight	List Price
No.		Size	per 100	Galv.
12	Galvanized strain plate or pole shim, Fletcher type		400 lbs.	†Each \$2.14

## Strain Plates and Guy Shims HOT GALVANIZED

The purpose of strain plates and guy shims is to keep the guy strand from cutting into the pole, which not only injures the pole, but retains moisture about the strand and accelerates corrosion. The strain plate has been adopted as standard by the Bell companies and by most large central stations, as it gives better protection to the pole, costs less, and is much cheaper to install than shims, which were formerly standard. From two to four plates are required per pole, depending on its diameter. Strain plates are made from 14 gauge galvanized steel plates. Guy shims are furnished either hot galvanized or plain.

			Р	er 100	_
List		Dimensions	Weight	List Price	
No.		in Inches	Lbs.	Galv.	
7575	Strain plate	4 x 8	85	\$22.88	
7570	Pole shim	1 x 1 x 8	45	9.72	
7571	Pole shim	1¼ x 1 x 8	57	10.30	



# **Hub Guards**

#### HOT GALVANIZED OR PLAIN

Hub Guards are used on corner poles to protect them from the hubs of wagons. The dimensions given are those of the flat plates, before bending, the 14 inch guards being bent to a 51/2 inch radius, and the 16 inch to a 71/2 inch radius. All holes are inch diameter for ½ inch lag screws, there being three holes on each side of the 18 inch guards and five on the 30 inch sizes. The 18 inch lengths are the A. T. & T. Co. standard.

	Dimensions	Per 100				
List No.	in Inches	Weight, Lbs. Plain	Galv.			
7100	14 x 18 x ½	1050 \$215.33	<b>\$</b> 278.70			
7101	$16 \times 18 \times \frac{1}{8}$	1100 232.35	300.64			
7102	$14 \times 30 \times \frac{3}{16}$	2400 438.04	601.33			
7103	$16 \times 30 \times \frac{1}{16}$	2500 460.64	630.70			

No. 7102

No. 7110

## Pole Protection Strips HOT GALVANIZED

These are also known as cribbing guards and are used to prevent horses gnawing poles. Made of 24 gauge galvanized sheet steel, 2 inches wide and 48 inches long, and curved to fit the pole, to which they are nailed, generally spaced about 3 inches on centers.

List No.	Weight per 100
7110	165 lbs.

Digitized by List Price per 100 29 Line Construction Material

## MISCELLANEOUS POLE STEPS



# Steps for Wood Poles

Of the steps for wood poles, the 10 inch hook head step is the standard of the National Electric Light Association, the American Telephone & Telegraph Company and the Western Union Telegraph Company. It has the fetter drive thread, which makes it easy to install and does not tear the wood of the pole when driven. The 10 inch button head step is also an A. T. & T. Co. standard and has the twist drive thread and a square shoulder under the head for a wrench hold.

Hook Head						Button Head					
				Per 100						Per 100	
List	Diam.,	Length	Weight,	List	Price	List	Diam.,	Length	Weight,	List	Price
No.	Inches	Inches	Lbs.	Plain	Hot Galv.	No.	Inches	Inches	Lbs.	Plain	Hot Galv.
7123	18	9	<b>652</b>	<b>\$</b> 9.60	\$11.69	7128	5/8	9	833	<b>\$</b> 12.16	\$14.81
7124	5/8	9	810	11.84	14.69	7129	5/8 5/8	10	913	13.22	16.12
7125	16 5/8 5/8	10	890	12.90	15.72						
				Steps	for Co	ncret	e Pole	88			
7131	5/8	14	160	<b>\$</b> 5.34	\$6.49	7136	5/8	14	160	<b>\$</b> 5.34	<b>\$</b> 6.49
7132	5/8	16	175	5.55	6.76	7137	5/8	16	175	5.55	6.76
7133	5/8 5/8 5/8	20	210	5.97	7.28	7138	5/8	20	210	5.97	7.28

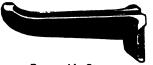
# Steps for Steel Poles and Towers













Socket McBride Pole Step

# Cutter Removable Pole Step

Weigh less than 14 oz. per pair, and are much more easily carried than a ladder. The sockets for them are hooked under so as to be sleetproof.

List No.		Std. Pkg.	‡List Price Each
20885	Polestep, painted	250	\$0.35 .21 .42 .28
20886	Socket, painted	250	.21
20887	Polestep, galvanized	250	. 42
20888	Socket, galvanized	250	.28

# Wooden Pole Step

This pole step is of oak, drilled for two spikes, and is easily nailed up against the pole.

List		†List Price
No.		per 1000
740194	Oak pole step, plain	\$20.00
740195	Oak pole step, creosoted	22.40
741628	Oak pole step, paraffined	22.40
1		

# McBride Removable Pole Step

Wt. per 100 Wt. per 100 ††List Price per 100 Plain Galv. Plain Galv. List No. mearest house.

## POLE STEP AND BANDS





No. 7206

Steps for Tubular Poles

Open hearth steel  $1\frac{1}{2}$  inches wide,  $\frac{1}{4}$  inch thick, is used in making steps for tubular poles. The steps are 6 inches long from pole to tip, which is turned up  $\frac{1}{2}$  inch. Machine bolts  $\frac{1}{2}$  inch diameter,  $\frac{1}{2}$  inches long, are furnished with these steps. Hot galvanized or plain.

		SOLID	STEPS		
	Nominal	Actual -		Per 100	
List	Size Pole	Outside Diameter	Weight,	List Price	
No.	Inches	of Pole, Inches	Lbs.	Plain	Galv.
7204	4	41/2	215	<b>\$</b> 72.20	\$95.02
72041/2	41/2	5 -	230	77.30	101.66
7205	5	$5\frac{1}{2}$	245	82.34	108.32
7206	6	$6\frac{5}{8}$	260	88.67	116.66
7207	7	75%	295	97.54	128.32
7208	8	858	320	80.28	140.82
7209	9	95/8	345	116.00	153.34
7210	10	1034	375	126.68	166.68
		SPLIT	STEPS	•	
7304	4	41/2	260	<b>\$88.66</b>	\$116.66
73041/2	41/2	5	275	93.74	123.32
7305	5 -	51/2	290	98.78	130.00
7306	6	51/2 35/8 75/8	315	104.50	137.50
7307	7	75×8	340	114.00	150.00
7308	8	85/8	365	123.48	162.52
7309	9	95%	390	133.00	175.02
7310	10	1034	420	143.16	188.32
		• •			

Trolley Pole Bands
HOT GALVANIZED OR PLAIN
Pole bands for attaching span wires to tubular poles are forged from open hearth steel 1½ inches wide and  $\frac{1}{12}$  inch thick and are equipped with  $\frac{1}{12} \times 1\frac{1}{12}$  inch machine bolts. When clamped tightly on the proper size of pole, the opening between the ends of the band is  $\frac{3}{12}$  inch wide. The bolts of the two-bolt solid and three-bolt split bands are  $\frac{1}{12}$  inches apart on centers.

The following table gives the actual outside diameters of standard tubular trolley poles, to fit which all pole bands are made:

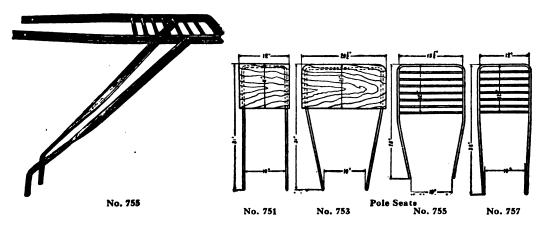
pole bands are made:

		nal Diameter Pole, Inches 4 4½ 5			Actual Outside Diameter of Pole, Inches $4\frac{1}{2}$ $5\frac{5}{2}$ $6\frac{5}{8}$	
Number	No. 7216 Or	ne-bolt		BANDS	No. 7226 Two-bolt	
Nominal Size Pole	List	Weight	r 100———————————————————————————————————	List	Weight Per 100-	List
Inches	No.	Lbs.	Price	No.	Lbs	Price
4 4½	7214	160	)	7224	200	1 0-
4 /2 5	$7214\frac{1}{2}$ $7215$	172 185	On application	7224½ 7225	212 225	On application
5 6	7216 7216	210	application	7226	250 250	application
Į	A Property of	S. C. L.				
	No.				No. 7336	•
		o-bolt	SPLIT	BANDS	Three-bolt	_
4	7324	205	] _	7334	245	) 0-
41/2	7324 1/2	220	On	73341/2	260	On
4½ 5 6	7325	235	application	7335	275	application
U	7326	255_	)	7336	295.	J

Delivery F. O. B. Factory, Pittsburgh, Pa. For warehouse deliveries write nearest house.

## POLE SEATS AND PLATFORMS

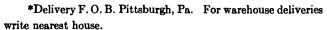
Hot Galvanized or Painted

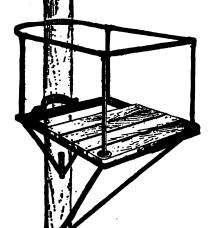


#### Peirce Pole Seats

These seats in a competitive test held a dead load of 1740 lbs. without deflection. A 1½ inch angle iron seat, weighing fifty per cent. more, collapsed with 960 lbs. load. The frames and braces of all styles are of 1 x ½ inch channel steel. The wood seats are 1½ inch cypress, boiled in creosote. The bars of the all steel seats are 3% inch square steel let into the frame in such manner as to leave no projecting ends. There is no strain on the riveted joints. The bars are placed with corners up, to prevent slipping. They are shipped completely assembled in bundles of five.

List	•	Std.	Weight	*Lis	st Price-
No.		Bundle	per 100	Each	Per 100
750	No. 1, painted Pole Seat	5	1260	<b>\$</b> 2.44	\$224.40
751	No. 1, galvanized Pole Seat	5	1260	2.88	264.00
<b>752</b>	No. 2, painted Pole Seat	5	1400	3.60	330.00
753	No. 2, galvanized Pole Seat	5	1400	4.16	382.80
754	No. 3, painted Pole Seat	5	1400	2.74	240.80
755	No. 3, galvanized Pole Seat	5	1400	3.45	316.80
756	No. 4, painted Pole Seat	5	1260	2.74	<b>240.80</b>
757	No. 4, galvanized Pole Seat	5	1260	3.45	316.80





Pole Platfors

# Pole Platform SECURITY TYPE

This type is intended for important points, and is therefore built strong in order to support several men at once. The guard rails go around the pole and fasten to it by lags. This makes the rail very staunch. For shipment, the platform and rail are wired to each other. All the braces, post, and lag screws are boxed and are complete. The dimensions of frame over all are  $32 \times 32$  inches and wood floor is  $27 \times 32$  inches.

List		Approximate	†List Price
No.		Weight Each	Each
010282	Pole Platform, with railing	90 lbs.	<b>\$29.00</b>
010283	Pole Platform, without railing	62 lbs.	25.00
Gal	vanized prices extra		

†Delivery F. O. B. Toledo, O. For warehouse deliveries write nearest house.

31

## **GUY ANCHORS**

## Matthews Scrulix Anchors

These anchors are screwed down into the solid ground without disturbing it. Each turn of the helix causes it to feed down into the ground and as it goes down the upper half again compresses the earth so that it is as solid above the anchor as around it.

All other types of ground anchors have moving parts which must be adjusted and which are frequently buried unadjusted, and they require a hole to be dug before installing. It is argued that this is wrong in principle because the filled hole of soft dirt above the anchor allows the rain and snow water to gradually soften the dirt and decrease the resistance of the earth above the anchor. The intermittent strains on the line have a tendency to raise the anchor up into this filled and softened earth. The results must necessarily be less satisfactory than with the Matthews Scrulix Anchor.

Matthews Scrulix Anchors are screwed into solid ground and afford the maximum of resistance to the upward pull of the guy lines.

Manufacturer absolutely guarantees the ungalvanized 5, 6 and 7 inch Matthews Scrulix Anchors to outlast any other anchors using galvanized steel rods of the same cross section, and they guarantee the ungalvanized 8, 10 and 12 inch Matthews Scrulix Anchors with square rods to outlast the same round section galvanized.

Twelve or more Matthews Scrulix Anchors and one No. 567 Wrench for their installation will be sent on thirty days' trial, charges prepaid, on the first order only. If unsatisfactory, they may be returned, freight charges collect.



The Ratchet Handle No. 765

No. 8000 No. 1000 No. 1200

	A 75 A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	List Pr	Net Additions for		
Mfr. No.	Diam. of Anchor	Less than	Less than 50 and over 11	50 or More	Delivery on Pacific Coast
502 R	5 in	\$250.00	\$230.00	\$210.00	\$0.13
603 R	6 in.	340.00	320,00	300.00	.20
704 R	7 in.	410.00	390.00	370.00	.30
567	Wrench	900.00	900.00	900.00	.50
*765	Handle	900.00	900.00	900.00	.14
800	8 in	900.00	900.00	900.00	.76
1000	10 in	1200.00	1200.00	1200.00	1.00
1200	12 in	1850.00	1950.00	1950.00	1.60

The above prices are for points east of Pacific Coast States. Add the amounts under Pacific Coast to the net cost per anchor to get prices in Pacific Coast States. The cost of galvanized anchors is found by adding the amounts under that heading to the net cost per anchor.



#### Sizes and Data

Mfr. No.	Wt., Lbs.	Size of Rods	Description
502 R	6½	½ inch round ½ inch round ¾ inch round Wrench Ratchet Handle for above	Rod anchor for lightest strains
603 R	10		Rod anchor for medium strains
704 R	15		Rod anchor for heavy strains
567	25		For installing the above anchors
765	7		See (*) Remarks
800	38	1½ inch square	Rod anchor for heavy strains
1000	50	1¼ inch square	Rod anchor for heavier strains
1200	80	1½ inch square	Rod anchor for very heavy strains

All rod anchors are 6 feet long over all. A number 567 wrench must be used with all anchors smaller than 800. No wrench is needed for the 800, 1000, or 1200 anchors.

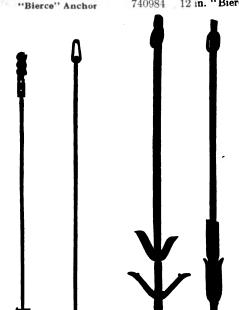
\* The 765 ratchet handle is for use with the 567 wrench, and is very useful where it is desired to put the anchor down next to walls, fences, etc.

# GUY ANCHORS AND ANCHOR RODS Bierce Guy Anchors

The "Bierce" Anchor works on the principle of the inverted wedge. It has exceptional holding power in dry sand or swampy soil. In a recent series of tests, the 8 inch size held over 16,000 pounds in clay and over 13,000 pounds in dry sand. It does away with expanding, screwing, driving or guessing. One man can bore hole with auger, set anchor and tamp it in fifteen minutes. It is made in one solid piece.

To install, bore a hole not less than five feet with an earth auger of same diameter as "Bierce" Anchor. Use ½ inch, 5% inch or 3½ inch anchor rods as desired for 8 inch size and 1 inch rods for 12 inch size. Drop the anchor into the hole with the point up. Tamp a quantity of broken stone or brick firmly around the anchor and it is ready to attach to the guy wire. The earth may be back filled loosely or tamped, as desired. We recommend the 8 inch anchor for a general purpose and the 12 inch for dead-ending lines under heavy strain.

				THE TIL	CO TOUCH	
List		Wgt. lbs.	Less			100 or
No.	Diam.	per 100	than 10	10 to 50	50 to 100	More
740981	5 in. "Bierce" Anchor	230	\$1.60	\$1.00	<b>\$0</b> .88	\$0.78
740982	6 in. "Bierce" Anchor	290	1.70	1.10	1.00	.88
740983	8 in. "Bierce" Anchor	530	2.20	1.32	1.22	1.10
740984	12 in. "Bierce" Anchor	1300	2.40	2.62	2.32	2.20



Type A

Type B

\*F. O. B. Factory, Cincinnati, Ohio. For ware-house deliveries write nearest house.

Note: Prices do not include rods.

# Adjustarods—Types A and B

Adjustarods are the only all in one metal equipments for "dead man" anchor installations. They have also the additional valuable advantage of turn-buckle properties, permitting slack in guy to be taken up at any time by merely applying a monkey wrench to the upper end of the rod.

Type A consists of a clamp, pulley, swivel, rod, washer and base nut.

Type B consists of eye, swivel, rod, washer and base nut.

Adjustarods are ordered as a unit and handled as such up to installation—no separate parts to forget or lose.

The rods of both types A and B are % inch in diameter, and threaded 12 inches on lower end.

					List Pr	ice lach	
List		Rod		Less			100
No.	Type	L'gth, ft.	Finish	than 10	10 to 49	50 to 99	and Over
740985	A	5	Galvanized only	\$4.00	<b>\$2.30</b>	\$2.10	<b>\$2.00</b>
740986	В	5	Galvanized only	2.20	1.40	1.20	1.10

Harpoon Guy Anchors

		•			THE PARTY	ICC MACH	
List	Length		$\mathbf{Wt}$ .	Less			100
No.	Rod	Finish	Lbs.			50 to 99 ar	
741274		Black enamel		<b>\$</b> 6.80		<b>\$</b> 5.04	<b>\$</b> 4.75
<b>74</b> 1275	5 ft.	Electro Galvanized	23	8.00	6.70	5.88	5.44

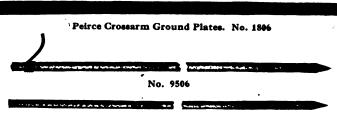
34

1Delivery F. O. B. Syracuse, N. Y. For warehouse deliveries write nearest house.

Closed

# Western Electric

## CONSTRUCTION MATERIAL





No. 9546

No. 9566 Ground Rods

## Ground Plates Hot Galvanized

They are made of galvanized 20 gauge sheet steel, 12 inches square, and in two types, with and without Peirce tinned copper terminal for ground wire. List No. 9545 9546 Wt., Lbs. 160 List Price With terminal..... application

# Peirce Crossarm Ground Plate

Hot Galvanized

At crossings of high voltage lines over railroads and telephone and telegraph circuits, some means must be provided for grounding any high tension wire which falls from its insulator to the wooden crossarm. Peirce ground plates accomplish this end. They are made of steel, 3 inches wide and ½ inch thick, formed to fit a round top crossarm, and have riveted at the center a tinned copper terminal to which the grounding wire is soldered.

In ordering, please give size and spacing of pin holes.

List No. Length in Feet Wt., Lbs.

1805 5 654
1806 6 782 List Price 6 7 8 9 1807 910 1038 1166 application 1808 1809 1810

# Ground Rods

HOT GALVANIZED OR PLAIN

The wired rods have, soldered firmly to their upper ends, No. 12 copper wires with free ends 5 inches long for attaching to the grounding wires running down the poles. Unwired rods are provided with holes through their upper ends for attaching grounding wires. These holes are  $\frac{1}{16}$  inch in diameter for  $\frac{3}{6}$  inch rods,  $\frac{1}{12}$  inch for  $\frac{1}{12}$  inch rods, and  $\frac{1}{16}$  inch and  $\frac{5}{8}$  and 1 inch rods, and are located 1 inch from the ends of the rods. WIRE STRAND



RAGON

				—List I	Price—						it Price—
List	Diam.	Length	Wt.,		per	List	Diam.	Length	Wt.,		per
No.	Ins.	Ft.	Lbs.	Each	100	No.	Ins.	Ft.	Lbs		
9505	1/2	5	340	\$1.16	\$68.44	9516	5/6	6	615	\$1.94	\$114.46
9506	1/2	6	405	1.26	75.52		, ,				
		GROU	ND I	RODS	WITE	TUOL	COPPI	ER WII	RE		
9555	3/6	5	180	\$0.66	\$39.18	9567	36	7	460	\$1.12	\$66.08
9556	12	6	215	.74	43.66	9576	5.7	6	660	1.44	84.96
9565	1/2	5	330	.85	50.04	9577	5%	7	700	1 68	99.12
9666	33	6	395	.99	58.42	9578	%	8	800	1.92	113.28

GROUND RODS WITH COPPER WIRE

## Ground Pipes **HOT GALVANIZED**

The ground pipe is made of the best grade of 3/4 inch wrought iron pipe, 8 feet long, is forged to a long, sharp point, and then thoroughly hot-dip galvanized, inside and out, after which the wooden plug is inserted a depth of 8

On account of its great stiffness, it is possible to drive the ground pipe in soils and to depths impossible to the ordinary ground rod.

List No.
9500
Wt. per 100
875 lbs. List Price per 100 On application

Paragon Ground Cones

Are made of a perforated sheet of pure copper; cone is filled with pea-sized charcoal or coke; the charcoal absorbs moisture by keeping the earth around the cone always moist, insuring a permanent and perfect ground.

The cone is furnished complete with charcoal, and with braided hollow copper cable of 61,968 C.M. cross section, into which the ground wire may be soldered. The cable is securely soldered to the bottom of the cone.

List No. 3 B. & S. †List Price Each \$5.70 7.50 Gauge 21 21 Length
1 ft.
2 ft. For



Line Construction Material

34-2

9500

## ANCHOR RODS AND EYE BOLTS



Standard Anchor Rods with Drop Forged Oval Eye

# **Anchor Rods**

#### Hot Galvanized

The eyes of Anchor Rods are drop forged except on the 11/4 and 11/2 inch rods, which have welded eyes. This insures rods of maximum strength with no possibility of the rods' being burned, as there is in welding the eyes.

Rods under ¾ inch diameter have 3½ inches of rolled threads. The ¾, 1, 1¼ and 1½ inch rods have 3½ inches of cut threads. All rods are made of full size stock as shown.

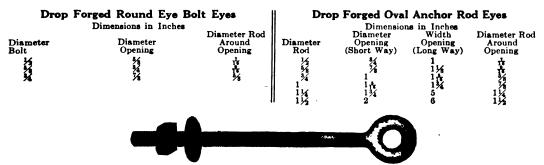
Rods with two eyes can be furnished at the same prices as standard rods. All prices include square nuts, but no washers.

Rods with welded eyes can be supplied at the same prices, if desired.

			Size			-Per 100		11			Size	Eye		—Per 100	
List	Dia.	Length			Weight	List I	Prices	List	Dia.	Length			Weight		Prices
No.	Inches	Feet	Width	Length	Lbs.	Plain	Galv.	No.	Inches	Feet	Width	Length	Lbs.	Plain	Galv.
7405	3/2	5	3/4	1	355	\$52.12	\$70.54	7427	3/4	7	1	14	1125	\$139.06	\$188.12
7406	3/2	6	. 3/	1	410	45.84	80.96	7428	34	8	1	1 🛣	1275	155.72	210.68
7407	3.5	7	3/4	1	465	67.54	91.38	7429	3/	9	1	1 🖟	1475	172.26	233.06
7415	3/8	5	7/8	11/8	550	72.54	98.12	7438	1	8	1 👫	13%	2320	218.20	392.94
7416	5/6	6	7%	11/8	650	83.90	113.46	7440	1	10		134	2850	349.06	472.54
7417	34	7	76	11/8	750	95.20	128.80	7444	11/4	10	1 1	5 -	4550	578.66	714.78
7418	32	8	1/8	11/8	850	106.52	144.12	7446	11/2	12	2	6	7750	979.18	4324.12
7426	*	6	1	1	975	122.36	165.60		· •						

## **Drop Forged Eyes**

The drop forged eye is furnished on all standard rods and bolts except those of 11/4 and 11/2 inches In addition to having nearly 40 per cent. greater strength than the welded eye, being in all cases stronger than the rod itself, the drop forged type of eye is absolutely reliable because it is forged from solid metal at a much lower temperature than the welding heat, and the chance of the metal burning, crystallizing, or being only partially welded is completely eliminated.



Standard Eye Bolts with Drop Forged Round Eyes

# **Drop Forged Eye Bolts**

#### Hot Galvanized

All bolts are rolled threaded 6 inches. Eye bolts are measured from the center of the eye to the end of the bolt. Prices include one square nut and one round washer.

In	ches	Weight	r 100———   List Prices	ı	nches	Weight	r 100	i	nches——	Weight	r 100——— List Prices
Dia.	Length	Lbs.	Galv.	Dia.	Length	Lbs.	Galv.	Dia.	Length	Lbs.	Galv.
3/2	6	56.7	\$28.12		8	111.3	\$37.56		10	190.6	\$56.36
<del>}</del> 3	.8	66.9 77.1	30.08 32.02	1/3	10	127.7	40.40		12	214.4	60.46
23	10 12	87.3	33.98	9/8 5/8	12 14	144.1 160.5	43.22 46.08	* A	14 16	238.2 262	64.60 68.70
33	14	97.5	31.50	5/8	16	176.9	48.96	3%	18	285.8	72.86
3/4	16	107.7	37.96	1%	18	193.3	51.78	34	20	309.6	<b>76</b> .96
13	18 20	117.9 128	39 90 41.86		20	209.7	54.66	!		T	

Delivery F. O. B. Factory, Pittsburgh, Pa. For warehouse deliveries write nearest house.

# INSULATED FORKS AND TURNBUCKLES

Hot Galvanized



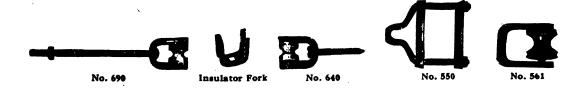
## Insulator Fork and Turnbuckles

List No.	Style	Std. Bundle	Wt. Lbs. per 100	List Price Each	List Price per 100
650	Insulator Fork and Eye, 6 in. Turnbuckle	10	356	<b>\$3</b> .54	\$311.04
651	Insulator Fork and Eye, 9 in. Turnbuckle		381	3.84	336.96
660	Two Insulator Fork and 6 in. Turnbuckle	10	435	3.94	345.60
661	Two Insulator Fork and 9 in. Turnbuckle	10	460	4.33	380.16



# Insulator Fork and Turnbuckles

Li <b>st</b> No.	Style ·	Std. Bundle	Wt. Lbs. per 100	List Price Each	List Price per 100
670	Insulator Fork and Hook, 6 in. Turnbuckle	10	341	<b>\$</b> 3.35	<b>\$293.76</b>
671	Insulator Fork and Hook, 9 in. Turnbuckle	10	366	3.64	319.68
680	Insulator Fork and Swivel Eye, 6 in. Turnbuckle	10	304	3.69	324.00
681	Insulator Fork and Swivel Eye, 9 in. Turnbuckle	10	329	3.99	349.92

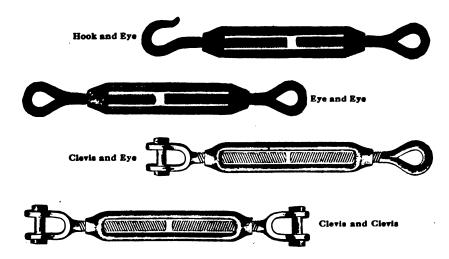


# Insulator Fork and Clevis

List No.	Style	Std. Bundle	Wt. Lbs. per 100	List Price Each	List Price per 160
690	Insulator Fork and 8 in. Carriage Bolt	10	170	\$0.73	\$64.80
691	Insulator Fork and 10 in. Carriage Bolt		187	.79	69.12
692	Insulator Fork and 12 in. Carriage Bolt	10	204	.84	73.44
693	Insulator Fork and 14 in. Carriage Bolt	10	221	. 89	77.76
549	Cross Arm Clevis, $3\frac{1}{4} \times 4\frac{1}{4}$ in. arms	25	134	.42	35.28
640	Insulator Fork and 4 in. Lag Screw		155	. 54	47.52
550	Cross Arm Clevis, 3½ x 4½ in. arms	25	138	.43	35.14
551	Cross Arm Clevis, 3¾ x 4¾ in. arms	25	144	.44	36.20
552	Cross Arm Clevis, 4 x 5 in. arms		150	.44	<b>36</b> .86
561	Insulated Fork for heavy secondaries		221	. 50	<b>50.4</b> 0
		CC1 7	. 1. A T	\1	ada form

NOTE: The Turnbuckles, Hook and Eye Bolts are drop forged. The Insulator Forks are made from

# PLAIN AND INSULATED TURNBUCKLES



# Plain Turnbuckles

		——Hool	and Ev	е	Ev	e and Ev	е	C'evi	s and E	ye	Clevis	and Clevis-
				Price	•		t Price			st Price		*List Price
Siz	•	List No.	Plain	Galv.	List No.	Plain	Galv.	List No.	Plain	Galv.	List No.	Plain Galv.
16 2	x 21/8	741285	\$0.65	<b>\$</b> 0.72	741312	\$0.65	<b>\$</b> 0. <b>72</b>	741339	<b>\$</b> 0.78	<b>\$</b> 0.86	741366	<b>\$</b> 0.85 <b>\$</b> 0.94
1/4 :	x 3 1/8	741286	.65	.72	741313	.65	.72	<b>74134</b> 0	.78	.86	<b>741367</b>	.85 .94
16 2	x 41/4	741285	.74	.82	741314	.74	.82	741341	.89	.96	741368	.96 1.07
- <b>8</b> ∕8 :	$x 4 \frac{1}{2}$	741288	.86	.96	741315	.86	.96	741342	1.03	1.15	741369	1.12 1.25
	x 5	741291	1.01	1.12	741318	1.01	1.12	741345	1.20	1.34	741372	1.31 1.46
	x 6	741292	1.03	1.44	741319	1.03	1.44	741346	1.24	1.73	741373	1.34 1.87
	x 12	741294	1.67	1.86	741321	1.67	1.86	741348	2.00	2.23	741375	2.17 2.42
	x 6	741295	2.16	2.40	741322	2.16	2.40	741349	2.59	2.88	741376	2.38 3.12
	x 9	741296	1.67	1.86	741323	1.67	1.86	741350	2.00	2.23	741377	2.17 2.42
	x 6	741298	2.72	2.30	741325	2.72	2.30	741352	3.26	2.76	741379	3.54 2.99
5/8 2	x 9	741299	2.59	2.88	741326	2.59	2.88	<b>74135</b> 3	3.11	3.46	741380	3.37 3.74
	x 12	<b>741300</b>	2.59	2.54	741327	2.29	2.54	741354	2.75	3.05	741381	3.37 3.30
3/4 2		741301	2.75	3.66	741328	2.75	3.06	741355	3.30	3.67	741382	3.58 3.98
3/4 2	к 9	741302	3.46	3.84	741329	3.46	3.84	741356	4.15	4.61	741383	4.50 4.99
	ĸ 12	741303	3.11	3.46	741330	3.11	3.46	741357	3.73	4.15	741384	4.04 4.50
₹ 7		741304	3.89	4.32	741331	3.89	4.32	741358	4.67	5.18	741385	5.06  5.62
<i>7</i> ∕8 ≥		741305	4 46	4.96	741332	4.46	4.96	741359	5.35	5.95	741386	5.80 6.45
	x 12	741306	3.83	4.26	741333	3.83	4.26	741360	4.60	5.11	741387	4.98 5.54
	x 9	741308	4.55	5.06	741335	4.55	5.06	741362	5.46	6.07	741389	5.92 6.58
1 2	x 12	741309	5.04	5.06	741336	5.04	5.06	741363	6.05	6.07	741390	6.55 6.58
11/8 2	ĸ 12	741310	8.12	9.02	741337	8.12	9.02	741364	9.74	10.82	741391	10.56 11.73
11/4 2		741311	10.80	12.00	741338	10.80	12.00	741365	12.96	14.40	741392	14.04 15.60



Eye and Insulated Eye

# Insulated Turnbuckles

						Max. Length	1	
			Average	Max.	Diam.	Between	Approx.	
List		Test Load	Breaking	Takeup	Bolt	Centers of	Net Wt.	†List Price
No.	·	in Lbs.	Load in Lbs.	in Ins.	in Ins.	Eyes in Ins.	per 100	per 100
740541		3000	6000	6	1/2	183/4	275 lbs.	\$137.50
740542	• • • • • • • • • • • • • • • • • • • •	4000	8000	6♣	5⁄8	18¾	325 lbs.	185.62
740543		3000	6000	12	1/2	2934	325 lbs.	206.20
740544		4000	8000	12	5/8	30	410 lbs.	275.00
*Del	ivery F.O. B. South Portl	and Me.	†Delivery	F. O. I	8 Schene	ctady N	Y. For	warehouse

\*Delivery F. O. B. South Portland, Me. †Delivery F. O. B. Schenectady N. Y. For warehouse deliveries write nearest house.

Man Tanak

## CONSTRUCTION MATERIAL



Weight per 100, Lbs.





Each \$0.40

\$36.30

No. 7586

D-- 100

**Drop Forged Bolt Clevis** Hot Galvanized

The bolt clevis is used where a long eye is necessary, for instance, in supporting suspension type insulators with a hook in the cap of the upper unit. It is attached to the crossarm or building by a % inch machine bolt, with either the head or nut inside the eye, which is 3½ inches long, and tapers from 5% inch wide at one end to 11/4 inches at the other, inside measurements. -List Price-Per 100 List No. 7515

# Drop Forged Eye Nuts Hot Galvanized

These eye nuts were primarily designed for use on the threaded ends of ½ or ¾ inch machine bolts passed vertically through crossarms for attaching suspension type insulators. They are also useful for dead ending lines. By their use a second eye may be added to the ½ or % inch eye bolts, which permits the attachment of a back guy to the same bolt that supports the strain insulators to the dead ended wire, thus removing the stress from the crossarm without the trouble and expense of using an additional eye bolt. A pole head guy can be attached to an eye nut on the end of the crossarm bolt. The ½ inch eye nut may be used on the end of a Peirce crossarm strap for back guying a line dead ended on a Peirce clamp pin. Many other uses will be found. The eye nuts are threaded to screw on standard ½ or 5% inch bolts, have eyes 1 inch inside diameter, and are sufficiently strong to develop the full strength of the bolt.

-List Price List No. 7500 7501 Per 100 \$36.40 42.68 Diameter Bolt, Inches Guy Thimbles Hot Galvanized Nos. 7594 and 7595 are standard sizes of the A. T. & T. Co. -Per 100-List No. 7593 7594 List Price \$9.28 10.44 16.98 HUBBARD &

Wall straps are used by telephone and electric railway companies for dead ending messengers or span wires on buildings and walls. They are made of 1/4 x 2 inch flat steel, 121/2 inches long, with an eye of 1 inch inside and 2½ inch outside diameter. Holes are provided for four ¾ inch Peirce Expansion Bolts or lags. List Price per 100
Price on application List No. Weight per 100, Lbs. 238 8937

Wall Straps

Hot Galvanized

No. 7584

# Guy Hooks

Hot Galvanized

The No. 7584 guy hook is the A. T. & T. Company's standard and is in general use, although the 2 bolt type is preferred by some construction men. For lighter work, the 3½ inch hook gives very satisfactory results.

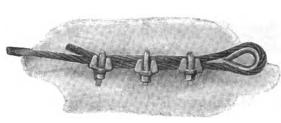
List No. 7583½ 7584 7586	Size Steel 1 1/4 x 1/4 1 1/4 x 1/4 1 1/4 x 1/4	Length 3½ 4 6	Diameter Holes	Weight, Lbs. 38 75 75	List Price \$12.38 20.00 20.00
	-/2 - /8	•	16	( 0 0 7 0	

Delivery F. O. B. Pittsburgh, Pa. For warehouse deliveries write nearest house ONL

No. 8937

## CONSTRUCTION MATERIAL







Showing Rope Wire Clip Applied

**Drop Forged Wire Rope Clips** 

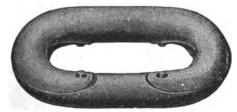
Hot Galvanized or Plain

Wire Rope Clips are drop forged to the Crosby pattern and made from best quality open hearth steel.

			-Per 100	1		t	'er 100
List No.	Size Strand, Ins.	Weight, Lbs.			Size Strand, Ins.	Weight, Lbs. I	ist Price Galv.
7480	1/4	25	<b>\$7</b> 9.33		5/8	87	<b>\$</b> 124.67
7481	5	25	79.33	7486	3/4	175	147.37
7482	<b>8</b> /8	37	90.66	7487	7∕8	200	170.00
7483	16	37	103.28		1	300	192.67
<b>7484</b>	1/2	<b>7</b> 5	103.28				

#### BULLDOG CLIPS Galvanized

740408 740409 740410	1/4 in. strand       \$8.76         1/6 in. strand       9.64         3/8 in. strand       11.88	740411 740412	1/2 in. strand
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Guy Shackle

# Acme Connecting Link

## Drop Forged

List		*List Pri	ce per Doz.	List		*List Pri	ce per Doz.
No.	Size	Plain	Galv.	No.	Size .	Plain	Galv.
741435	🔒 in.	\$1.18	\$1.70	741441	🔥 in.	<b>\$</b> 3.16	<b>\$</b> 4.62
741436	1/4 in.	1.18	1.70	741442	<b>∳</b> in. ⅓ in.	3.56	<b>5.2</b> 8
741437	16 in.	1.32		741443	3⁄4 in.	4.88	7.26
741438	3/8 in.	1.84	2.64		⅓ in.	8.20	11.88
741439	7 in.	2.24		741445	1 in.	11.22	16.36
<b>741440</b>	⅓ in.	2.64	3.96	1			

# Screw Guy Shackles

Drop Forged Steel

		Length		Diam.	*List per				Length		Diam.	*List per	Price 100
List No.	Size	Inside Inches	Eyes Inches	of Pin Inches	Galv.	Jap.	List No.	Size	Inside Inches	Eyes Inches	of Pin Inches	Galv.	Jap.
741446 741447	3 16 1/4	7/8 1 1 16	3/8 1/2	1/4 5 16	\$37.50 37.50	\$34.50 34.50	$741454 \\ 741455$	3/4 7/8	23/4 33/8	$\frac{1\frac{7}{32}}{1\frac{3}{8}}$	1 1/8	\$105.00 159.40	\$86.26 127.50
741448 741449	5 16 3/8	11/4	9 16 11 16	5 16 3/8 7 16	37.50 40.50		$741456 \\ 741457$	1 11/8	33/4 43/8	15/8 17/8	1½ 1¼		180.00 $234.00$
741450 741451	16	13/4	116 3/4	1/2 9 16	46.50 55.50	49.50	741458 741459	11/4 13/8	5 5 1/4	21/8	$\frac{13/8}{11/2}$		$334.00 \\ 562.00$
741452 741453	16 5/8	2 23/8	1 1 1 8 1 1 6 1 1 6 1 1 6 1 1 1 1 1 1 1	5/8 3/4	76.90 90.00	69.40 76.90	741460	11/2	51/2	21/4	15/8	868.00	702.00

<sup>\*</sup>Delivery F. O. B. Factory, South Portland, Me. For warehouse deliveries write nearest house.

# Western Electric

# CONSTRUCTION MATERIAL





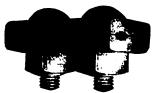


No. 740508 Showing Top

# Matthews Boltless Guy Clamp

				†Price per 1	00
List No.	·	Wgt.	Less 500	500 to 1000	1000 and Over
740510	"Baby" guy clamp	50 lbs.	\$25.00	\$22.00	\$21.00
740511	"Giant" guy clamp	130 lbs.	<b>38.00</b>	<b>36</b> .00	34.00

# Matthews Two-bolt Guy Clamp





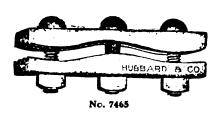


# Rolled Steel Guy Clamps

			Wgt.	*List	Price
List No.	Туре	Length	Per 100	Each	Per 100
7448	2 bolt	6 in.	115 lbs.	\$0.39	\$31.74
7449	3 bolt	4 in.	185 lbs.	.53	42.67
7450	3 bolt	6 in.	210 lbs.	.63	50.88

# Heavy Malleable Iron Guy Clamps

7460 3 bolt 6 ft. 2 in. wide 370 lbs. \$1.29 \$103.60





No. 8903

# Shaper Forged Guy Clamps

List No. 7465	Bolt 3	Length $5\frac{1}{2}$ in.	Width 1½ in.	Size Strand $\frac{1}{4}$ to $\frac{1}{2}$ in.	Wgt. Lbs. 210	 Galvd.— Per 100 \$77.20
		Cable	Suspension	Clamps		

8901 1 2½ in. ¼ to ¼ in. 80 \$0.24 \$19.33 8903 3 5¾ in. 14 to ¼ to ¼ in. 205 63 50.66

\*Delivery F. O. B. factory, Pittsburgh, Pa. For warehouse deliveries write nearest house.

# CONSTRUCTION MATERIAL







No. 8911

Universal Messenger Hangers HOT GALVANIZED

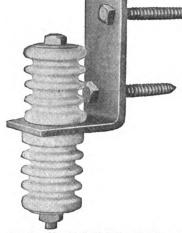
						Per 100
List	Size Steel		Length of Legs	1	Weight	*List Price
No.	Inches		Inches		Lbs.	Galv.
8911	$2 \times \frac{1}{2}$		$5 \times 3\frac{1}{4}$		325	<b>\$7</b> 8.70
8912	$1\frac{3}{4} \times \frac{3}{8}$		$5 \times 3\frac{1}{4}$		235	72.66
		100	<b>a</b> .	e · c		

Reinforcing and Safety Straps for Suspension Clamps

List		Size Steel	Pe	r 100
No.		Inches	Wt., Lbs.	List Price
8905	Reinforcing strap	$1\frac{3}{4} \times \frac{1}{8}$	50	On
8906	Safety strap	13/4 x 1/8	87	application
8907	Combination strap	$1\frac{3}{4} \times \frac{1}{8}$	130	









No. 9200

No. 9210

Bracket No. 9202 with No. 9220 Knobs and Two 3/8 x 4 inch Lag Screws

			Pe	r 100
List	Style	Length of Legs	Weight	*List Price
No.	Bracket	Inches	Lbs.	Galv.
9200	L House	3‡ x 2‡	51	\$15.20
9202	L Pole	4 x 3	87	25.32
9210	T Pole	5 x $2\frac{1}{2}$	65	30.40

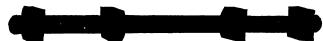
Hubbard Telephone Distributing Brackets

# Porcelain Knobs Complete With Galvanized Bolts for Distributing Brackets

		<i></i>	Per 100
List		Weight	*List Price
No.		Lbs.	Galv.
9215	One double groove	68	<b>\$7.28</b>
9216	One four-groove	128	12.13
9220	Two four-groove	250	23.10
*Delivery: F. O. I	3. Pittsburgh, Pa. †Delivery:	F. O. B. Chicago, Ill. F	or warehouse deliveries
write nearest house.		Digitized by	Google

26-7

# SPACING BOLTS AND LAG SCREWS



Standard Double Arming Bolt

# **Double Arming Bolts**

Hot Galvanized or Plain

The standard length of thread on each end is: For 12 inch bolts, 5 inches; 13 and 14 inch bolts, 6 inches; 15 and 16 inch bolts, 7 inches; 17 inch and longer bolts, 8 inches. The points are finished and prices include 4 square outs, but no washers.

and being and tought of the manager of the point of the property and process included and pro												
	Manufacturer's List. Special Discounts on Application											
		Pe	r 100 I	4		P	er 100	lı .		Pe	r 100	
Diam.	Length	Weight	List	Diam.	Length	Weight	List	Diam.	Length	Weight	List	
lns.	Ins.	Lbs.	Price	Ins.	Ins.	Lbs.	Price	Ins.	Ins.	Lbs.	Price	
36	12	78	\$12.70	5,6	12	138	\$19.44	3/1	12	220	\$28.80	
1.5	13	83	13.22	5/8 5/8	13	145	20.20	34	13	232	29.90	
35	14	88	13.74	5 8	14	153	20.96	3/4	14	244	31.00	
3/2	15	93	14.26	5/8 5/8 5/8 5/8	15	162	21.72	34	15	256	32.10	
1/2	16	98	14.78	5/8	16	168	22.48	3/4	16	268	33.20	
1/2	17	103	15.30	5/8	17	178	23.24	34	17	280	34.30	
1/2	18	108	15.82	5 8	18	188	24.00	34	18	292	35.40	
⅓	19	113	16.34	5 8	19	198	24.76	34	19	304	36.50	
1/2	20	118	16.86	5 8 5 8 5 6	20	208	25.52	14	20	316	37.60	
3/2	21	123	17.38	5/8	21	218	26.28	34	21	328	38.70	
1/2	22	128	17.90		22	228	27.04	34	22	340	39.80	
1/2	23	133	18.42	5/8	23	238	27.90	%	23	352	40.90	
1/2	24	138	18.94	5/8	24	248	28.66	II ¾	24	364	42.00	



Fetter Drive Thread

# Standard Lag Screws

Three types of lag screws are illustrated, with the wood screw, twist drive and fetter drive types of thread. The National Electric Light Association, American Telephone & Telegraph Company and Railway Signal Association specifications call for the fetter drive thread, and 90% of the lag screws made for pole work are of this type. The fetter drive lag does not tear the wood of the pole when driven, and, if given a few turns with a wrench, has greater holding power than the other types of lags which have been screwed with a wrench from the start. For this reason, fetter drive screws will be furnished on all orders, unless otherwise specified.

Length	•	Manufacturer's	List Price			on Applicat	tion	
Inches Under	Head 1/4 and A	3/9	14	1/2	eter, Inches 🚜 and 3⁄4	34	3/8	1
11/2	\$2.25	\$2.70	\$3.15	<b>\$</b> 3 75				
2	2.45	2.96	3.47	4 11	\$6.00			
21/2	2.65	3.22	3.79	4.47	6 50	. \$9.20		
3	2.85	3.48	4.11	4.83	7.00	9.90	\$15.00	
31/2	3.05	3.74	4.43	5.19	7.50	10.60	16.00	\$22.00
4	3.25	4.00	4 75	5.55	8 00 .	11.30	17.00	23.30
416	3.45	4.26	5.07	5.91	8.50	12.00	18.00	24.60
5	3.65	4.52	5.39	6.27	9.00	12.70	19 00	25.90
51/2	3.85	4.78	5.71	6.63	9.50	13.40	20.00	27.20
6	4 05	5.04	6.03	6.99	10.00	14.10	21.00	28.50
61/2	4.25	5.30	6.35	7.35	10.50	14.80	22.00	29.80
7 .	4.45	5.56	6.67	7.71	11.00	15.50	23.00	31.10
716	4.65	5.82	6.99	8.07	11.50	16.20	24.00	32.40
	4.85	6 08	7.31	8.43	12.00	16.90	25.00	33.76
8 <sup>-</sup>	5.25	6 60	7.95	9.15	13.00	18.30	27.00	36.30
1Ŏ	5.65	7.12	8.59	9.87	14.00	19.70	29.00	38.90
11	6.05	7.64	9.23	10.59	15.00	\ 21.10	31,00	41.50
12	6.45	8.16	9.87	11,31	16.00	22.50	33.00	44.10
		Oper cent. extra.				22.00	-	3.0

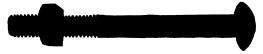
Length			Wei	ght in Lbs.,	per 100 er, Inches		•	
Inches	*	36	14		5, Inches	34	3/6	1
136	3.8	5.4	8.4	11.4			· • • •	• • •
2	4.7	. 6 . 6	10.2	13.8	22.2			
234	5.6	•7.9	11.9	16.1	26	41		
3 ~	6.5	9.1	13.6	18.4	29.8	46.5	64.8	
314	7.4	10.4	15.4	20.8	33.7	52	72.5	103
4	8.3	11.6	17.1	23.1	37.5	57.5	80. <b>2</b>	113
416	9.2	12.9	18.9	25.5	41.4	63	<b>87.9</b>	123
5	10.1	14.1	20.6	27.8	45.2	68. <b>5</b>	95. <b>6</b>	133
514	11	15.4	22.4	30.2	49.1	74	103. <b>3</b>	143
6	11.9	16.6	24.1	32.5	52.9	79.5	111	153
7.	13.7	19.1	27.6	37.2	60.6	90.5	126.4	173
8	15.5	21.6	31.1	41.9	<b>68.3</b>	101.5	141 8	193
9	17.3	24.1	34.6	46.6	76	112.5	157. <b>2</b>	213
10	19.1	26.6	38.1	51.3	83.7	123.5	172.6	233
11	20.9	29.1	41.6	56	91.4	134(5_		253
12	22.7	21.6	45.1	60.7	99.1 DIG	litized145.5	203.4	273
•• •				40				

Line Construction Material

42

# CARRIAGE BOLTS

Hot Galvanized or Plain



#### Standard Carriage Bolt

Carriage bolts are used for attaching the braces to crossarms on most overhead lines, the standard N. E. L. A. bolt being  $\frac{3}{6}$  x  $4\frac{1}{2}$  inches and that of the A. T. & T. Company  $\frac{3}{6}$  x 4 inches. Carriage Bolts have standard heads, square nuts, finished points and rolled threads, although cut threads can be supplied if required. Like machine bolts, carriage bolts have a generous length of thread, the size mentioned having  $1\frac{1}{2}$  inches, and other bolts in proportion to their length. The round washers used with carriage bolts are listed below.

Manufacturer's	List	Price	per	100.	Special	Discounts on	Application
----------------	------	-------	-----	------	---------	--------------	-------------

Length			Diam	eter, Inches-	·		
Inches	$\frac{3}{16}$ and $\frac{1}{4}$	15 16	3/8	7 16	1/2	$\frac{9}{16}$ and $\frac{5}{8}$	3/4
1	\$1.00	\$1.40	\$1.90	<b>\$2.20</b>	<b>\$</b> 3.25	<b>\$</b> 5.75	\$8.50
1 1/2	1.00	1.40	1.90	2.20	3.25	5.75	8.50
2	1.10	1.52	2.06	2.40	3.25	5.75	8.50
$2\frac{1}{2}$	1.20	1.64	2.22	2.60	3.25	5.75	8.50
3 `	1.30	1.76	2.38	2.80	3.53	6.13	9.00
31/2	1.40	1.88	${f 2}$ . ${f 54}$	3.00	3.81	6.51	9.50
4	1.50	2.00	<b>2</b> .70	3.20	4.09	6.89	10.00
41/2	1.60	2.12	2.86	3.40	4.37	7.27	10.50
5	1.70	2.24	${f 3}$ . ${f 02}$	3.60	4.65	7.65	11.00
$5\frac{1}{2}$	1.80	2.36	3.18	3.80	4.93	8.03	11.50
6	1.90	2.48	<b>3.34</b>	4.00	5.21	8.41	12.00
$6\frac{1}{2}$	2.00	2.60	3.50	4.20	5.49	8.79	12.50
7	2.10	2.72	3.66	4.40	5.77	9.17	13.00
$7\frac{1}{2}$	2.20	2.84	3.82	4.60	6.05	9.55	13.50
8	2.30	2.96	3.98	4.80	6.33	9.93	14.00
81/2	2.40	3.08	4.14	5.00	6.61	10.31	14.50
9	2.50	3.20	4.30	5.20	6.89	10.69	15.00
$9\frac{1}{2}$	2.60	3.32	4.46	5.40	7.17	11.07	15.50
10	2.70	3.44	4.62	5.60	7.45	11.45	16.00
11	2.90	3.68	4.94	6.00	8.01	12.21	<b>17.0</b> 0
12	3.10	3.92	5.26	6.40	8.57	12.97	18.00
13	3.30	4.16	5.58	6.80	9.13	13.73	19.00
14	3.50	4.40	5.90	7.20	9.69	14.49	20.00
15	3.70	4.64	6.22	7.60	10.25	15. <b>25</b>	21.00
16	3.90	4.88	6.54	8.00	10.81	16.01	22.00
17	4.10	5.12	6.86	8.40	11.37	16.77	<b>23</b> .00
18	4.30	5.36	7.18	8.80	11.93	17.53	24.00
19	4.50	5.60	7.50	9.20	12.49	18.29	<b>25</b> .00
20	4.70	5.84	7.82	9.60	13.05	19.05	26.00

Add 15 per cent. extra for hexagon nuts. Intermediate lengths take next higher list.

Larger diameters than 34 inch take machine bolt list.

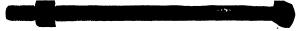
# Carriage Bolts

			Weight, Lb	s., per 100			
Length ~				Diameter, Inches	· · · · · · · · · · · · · · · · · · ·		
Inches	1/4	1 <del>5</del>	3/8	16	1/2	5/8	3/4
1	2.6	4.6	7.1	10.8	14.5	27.1	
11/2	<b>3.2</b>	5.6	8.5	12.8	17.1	31.2	
2	3.9	6.5	10	14.7	19.6	35.3	
$2\frac{1}{2}$	4.5	7.5	11.4	16.7	22.2	39.4	58.4
3	5.2	8.4	12.9	18.6	24.7	43.5	64.4
3½	5.8	9.4	14.3	20.6	27.3	47.6	70.3
4	6.5	10.3	15.8	<b>22.5</b>	29.8	51.7	76.3
41/2	7.1	11.3	17.2	24.5	32.4	55.8	82.2
4½ 5	7.8	<b>12.2</b>	18.7	<b>2</b> 6.4	34.9	59.9	88.2
5½ ·	8.4	13.2	20.1	28,4	37.5	64	94.1
6	9.1	14.1	21.6	30.3	40	68.1	100.1
61/2	9.7	15.1	23	<b>32</b> . <b>3</b>	42.6	72.2	106
7	10.4	16	24.5	34.2	45.1	76.3	112
$7\frac{1}{2}$	11	17	<b>25.9</b>	35.2	47.7	80.4	117.9
8	11.7	17.9	<b>27</b> . <b>4</b>	38.1	50.2	84.5	123.9
81/2	12.3	18.9	28.8	40.1	52.8	88.6	129.8
9	13	19.8	30.3	42	<b>55.3</b>	92.7	135.8
91/2	13.6	20.8	31.7	44	<b>57</b> . 9	96.8	141.7
10	14.3	21.7	<b>33 . 2</b>	45.9	60.4	100.9	147.7
11	15.6 16.9	$23.6 \\ 25.5$	$\frac{36.1}{39}$	49.8	65.5 D <b>70</b> 1.6ed by	G417351e	159.6
12				53.7			171.5

# MACHINE BOLTS

# Square Heads, Square Nuts and Finished Points

Hot Galvanized or Plain



Standard Crossarm or Through Bolt Manufacturer's Price List, per Hundred. Discounts on Application

Length						Diameter, In	ches				
Inches	1/4	<u>\$</u>	3/8	16	1/2	$\frac{1}{18}$ and $\frac{5}{8}$	3/4	₹8	1	$1\frac{1}{8}$	11/4
3/4 to 1 !	<b>2 \$1.70</b>	\$2.00	\$2.40	\$2.80	<b>\$</b> 3.60	<b>\$</b> 5.20	\$7.70	\$10.50	\$15.10	\$22.50	\$30.00
2	1.78	2.12	2.56	3.00	3.86	5.58	8.25	11.20	16.00	23.70	31.50
$2\frac{1}{2}$	1.86	2.24	2.72	3.20	4.12	5.96	8.80	11.90	16.90	<b>24</b> .90	33.00
3	1.94	2.36	2.88	3.40	4.38	6.34	9.35	12.60	17.80	<b>26</b> .10	<b>34</b> . <b>5</b> 0
$3\frac{1}{2}$	2.02	2.48	3.04	3.60	4.64	6.72	9.90	13.30	18.70	<b>27.3</b> 0	36.00
4	2.10	2.60	3.20	3.80	4.90	7.10	10.45	14.00	19.60	28.50	37.50
41/2	2.18	2.72	3.36	4.00	5.16	7.48	11.00	14.70	20.50	<b>29.70</b>	39.00
5	2.26	2.84	3.52	4.20	5.42	7.86	11.55	15.40	21.40	<b>30</b> . <b>90</b>	40.50
$5\frac{1}{2}$	2.34	2.96	3.68	4.40	5.68	8.24	12.10	16.10	22.30	32.10	42.00
6	2.42	3.08	3.84	4.60	5.94	8.62	12.65	16.80	23.20	33.30	43.50
$6\frac{1}{2}$	2.50	3.20	4.00	4.80	6.20	9.00	13.20	17.50	24.10	34.50	45.00
7	2.58	3.32	4.16	5.00	6.46	9.38	13.75	<b>18.20</b>	<b>25</b> .00	35.70	46.50
$7\frac{1}{2}$	2.66	3.44	4.32	5.20	6.72	9.76	14.30	18.90	25.90	36.90	48.00
8	2.74	3.56	4.48	5.40	6.98	10.14	14.85	19.60	<b>26</b> .80	38.10	49.50
9	2.90	3.80	4.80	5.80	7.50	10.90	15.95	21.00	<b>28</b> .60	40.50	52.50
10	3.06	4.04	5.12	6.20	8.02	11.66	17.05	<b>22</b> . <b>40</b>	<b>30.40</b>	42.90	55.50
11	3.22	4.28	5.44	6.60	8.54	12.42	18.15	23.80	32.20	45.30	58.50
12	3.38	4.52	5.76	7.00	9.06	13.18	19.25	25.20	34.00	47.70	61.50
13			6.08	7.40	9.58	13.94	20.35	26.60	35.80	50.10	64.50
14			6.40	7.80	10.10	14.70	21.45	28.00	37.60	<b>52.50</b>	67.50
15			6.72	8.20	10.62	15.46	22.55	29.40	39.40	<b>54</b> . <b>90</b>	70.50
16	•••		7.04	8.60	11.14	16.22	23.65	<b>30</b> .80	41.20	<b>57.30</b>	<b>73.50</b>
17					11.66	16.98	24.75	32.20	43.00	59.70	76.50
18					12.18	17.74	25.85	33.60	44.80	62.10	79.50
19		• • • •			12.70	18.50	26.95	35.00	46.60	64.50	82.50
20					13.22	19.26	<b>28.05</b>	36.40	48.40	66.90	85.50

Bolts with hexagon heads or hexagon nuts, 10 per cent. extra.

If both hexagon heads and hexagon nuts, 20 per cent. extra.

In ordering bolts please specify length from under head to point, except for countersunk head bolts, which are measured over all. Name diameter first, and then length, thus: ½ x 3.

Length						Lbs., per Diameter, In					
Inches	1/4	18	3/8	16	1/2	18 and 5/8		7∕8	1	11/8	11/4
11/2	3.1	5.6	8.8	13.5	18.5	33.4	53.8	88	130		
2	3.7	6.5	10.2	15.4	21	37.5	59.7	96.2	140.8		• • • • •
21/2	4.4	7.5	11.7	17.4	23.6	41.6	65.7	104.4	151.6		••••
3	5	8.4	13.1	19.3	26.1	45.7	71.6	112.6	162.4	210	286
31/2	5.7	9.4	14.6	<b>21</b> .3	28.7	<b>49</b> .8	<b>77</b> . 6	120.8	<b>173</b> . <b>2</b>	223.8	302.5
4	6.3	10.3	16	23.2	31.2	53.9	83.5	129	184	237.6	319.1
41/2	7	11.3	17.5	<b>25</b> .2	33.8	58	89.5	137.2	194.8	251.4	335.6
5	7.6	<b>12.2</b>	18.9	27.1	<b>36</b> .3	62.1	95.4	145.4	205.6	265.2	352.2
$5\frac{1}{2}$	8.3	13.2	20.4	29.1	38.9	66.2	101.4	153.6	216.4	279	368.7
6	8.9	14.1	21.8	31	41.4	70.3	107.3	161.8	<b>227</b> .2	292.8	<b>385.3</b>
$6\frac{1}{2}$	9.6	15.1	23.3	33	44	74.4	113.3	170	238	<b>306.6</b>	401.8
7	10.2	16	24.7	34.9	46.5	<b>78.5</b>	119.2	178.2	<b>248.8</b>	320.4	418.4
71/2	10.9	17	26.2	36.9	49.1	82.6	125.2	186.4	259.6	334.2	434.9
8	11.5	17.9	27.6	38.8	51.6	86.7	131.1	194.6	270.4	348	451.5
9			30.5	42.7	<b>5</b> 6.7	94.9	143	211	292	375.6	484.6
10			33.4	46.6	61.8	103.1	154.9	227.4	313.6	403.2	517.7
11			36.3	50.5	66.9	111.3	166.8	243.8	335.2	430.8	550.8
12			39.2	54.4	72	119.5	178.7	260.2	356.8	458.4	583.9
13					77.1	127.7	190.6	276.6	378.4	486	617
14					82.2	135.9	202.5	293	400	513.6	<b>650.1</b>
15					87.3	144.1	214.4	309.4	421.6	541.2	6 <b>83</b> .2
16			• • • •		92.4	152.3	226.3	325.8	443.2	568.8	716. <b>3</b>
17					97.5	160.5	238.2	342.2	464.8	596.4	749.4
18					102.6	168.7	250.1	358.6	486.4	624	782.5
19					107.7	176.9	262	375	508	651.6	815.6
20				• • • •	112.8	185.1	273.9	391.4	529.6	679.2	848.7

Delivery F. O. B. Pittsburgh, Pa. For warehouse deliveries write nearest house of

# STANDARD WOOD SCREWS



## Iron Wood Screws

Note: The following varieties of iron screws are invoiced from this list at varying discounts: Flat, round, fillister and oval head screws, dowel, winged, headless, pinched, bung head and felloe screws, bright blued, nickel plated, silver plated, brassed, bronzed, coppered, japanned, lacquered, tinned and galvanized, also drive screws.

Manufacturer's List; Prices per Gross. Special Discounts on Application.

No.	List Price Inch	No.	List Price f Inch	No.	List Price Inch	No. 5/1	List Price Inch	No.	List Price 4 Inch	No.	List Price 1/8 Inch	No.	List Price Inch
0 1 2 3 4	\$0.72 .72 .72 .72 .72	0 1 2 3 4 5 6 7 8	\$0.72 .72 .72 .72 .72 .75 .78 .82 .88	1 2 3 4 5 6 7 8	\$0.72 .72 .72 .75 .78 .80 .84 .90	1 2 3 4 5 6 7 8	\$0.72 .72 .72 .75 .78 .82 .86 .92	2 3 4 5 6 7 8 9	\$0.72 .75 .78 .82 .85 .90 .95 1.00	2 3 4 5 6 7 8 9	\$0.74 .78 .82 .85 .90 .94 1.00 1.05	3 4 5 6 7 8 9 10 11	\$0.80 .84 .87 .92 .98 1.05 1.10 1.20
3 4 5 6 7	\$0.88 .92 .98	3	.94 Inches \$0.98	10 11 12 134	1.05 1.10 1.20 Inches	10 11 12 13 14	1.07 1.12 1.20 1.25 1.30	11 12 13 14 15 16	1.15 1.25 1.35 1.50 1.65 1.80	11 12 13 14 15 16	1.25 1.35 1.45 1.55 1.75 2.00	12 13 14. 15 16 17	1.40 1.60 1.70 2.00 2.50 2.70
6 7 8 9	1.05 1.10 1.15 1.20 1.30	4 5 6 7 8	1.05 1.10 1.15 1.20 1.30	5 6 7 8	\$1.30 1.35 1.45 1.50	5 6	\$1.45 1.50	21/4	Inches	2½ 5	2 Inches \$1.90	18 20	2.80 3.50 Inches
10 11 12 13 14 15 16 17 18 20 22 24	1.30 1.40 1.55 1.70 1.90 2.15 2.50 2.75 3.30 4.00 4.80 5.40	9 10 11 12 13 14 15 16 17 18 20 22 24	1.35 1.40 1.50 1.65 1.80 2.00 2.35 2.80 3.20 3.80 4.30 5.90	10 11 12 13 14 15 16 17 18 20 22 24	1.55 1.60 1.70 1.80 2.00 2.25 2.60 2.90 3.50 4.00 4.50 5.20 6.00	7 8 9 10 11 12 13 14 15 16 17 18 20 22	1.55 1.60 1.65 1.75 1.85 2.00 2.20 2.45 2.75 3.10 3.70 4.20 4.80 5.50	6 7 8 9 10 11 12 13 14 15 16 17 18 20	1.60 1.65 1.75 1.95 2.05 2.20 2.35 2.65 3.10 3.50 3.85 4.55	6 7 8 9 10 11 12 13 14 15 16 17 18 20	2.00 2.10 2.20 2.30 2.40 2.50 2.60 2.70 2.90 3.30 3.65 4.20 5.80	6 7 8 9 10 11 12 13 14 15 16 17	\$2.40 2.60 2.70 2.80 2.90 3.00 3.10 3.20 3.30 3.60 3.90 4.50 5.00
6	Inches \$2.95	8	Inches \$3.90	8	Inches \$4.90	24	6.40	22 24	6.10 6.90	22 24	6.70 7.50	20 22 24	6.10 7.20 8.50
7 8 9 10 11 12 13 14 15 16 17 18 20 22 24 26	3.00 3.05 3.10 3.15 3.20 3.30 3.40 3.50 4.20 4.80 5.50 6.50 7.50 8.70 10.50	9 10 11 12 13 14 15 16 17 18 20 22 24 26	4.00 4.10 4.20 4.30 4.40 4.75 4.75 5.40 6.15 7.30 8.70 10.20	9 10 11 12 13 14 15 16 17 18 20 22 24 26 28 30	5.10 5.20 5.30 5.40 5.60 5.90 6.20 7.60 8.60 9.70 11.20 14.00 18.50	12 13 14 15 16 17 18 20 22 24 26 28 30	\$7.00 7.20 7.60 7.85 8.15 8.60 9.15 9.85 11.20 13.50 16.00 18.50 21.50	12 13 14 15 16 17 18 20 22 24 26 28 30	\$8.10 8.30 8.60 9.10 9.70 10.10 11.00 11.50 13.00 15.00 24.00	12 13 14 15 16 17 18 20 22 24 26 28 30	\$10.00 10.30 11.00 12.40 13.00 14.50 16.00 18.00 20.00 27.00 30.50	σle	

# **CONSTRUCTION MATERIAL**

#### Round Washers

	,		in Inches		Per 1000					
List	Outside	Diam.	Size l	Bolt	Thickness	Weight -	List	Price		
No.	Diam.	Hole	Machine	Carriage	Gauge	Lbs.	Plain	Galv.		
7801	1	14	3/6		14	16	\$4.48	\$6.35		
7802	11/4	1/2		3/8	14	30	6.40	9.06		
7803	138	18	1/2	3/6	12	42	8.40	11.89		
7804	11/2	₹	1/2	3/8	10	66	12.80	18.13		
7805	134	H	5/8	1/2	10	75	13.36	18.93		
7806	2	₩.	34	54	9	112	18.40	26.08		
7807	21/4	H	3/4		8	135	21.60	30.61		
7808	21/2	1 🕳	1, ,	3/4	8	180	28.80	40.80		

#### Square Washers

List	Dimensio	ons In Inches - ·-			Per 1000	
No.	Size Washer	Hole	Bolt	Weight, Lbs.	Plain	Galv.
7811	2 x 2 x 1/8	<b>#</b>	1/2	154	\$21.68	\$28.35
7812	2 x 2 x 1/8	3/4	5/g	145	21.68	28.35
7813	2¼ x 2¼ x 🔒	3⁄4	5/8	250	34.66	45.33
7814	21/4 x 21/4 x 👬	7/a	3/4	240	34.66	45.33
7815	3 x 3 x 1 t	34	5/8	445	65.01	85.01
7816	3 x 3 x 🛧	7∕8	3/4	435	65.01	85.01
7817	3 x 3 x 1/4	*4	5/6	585	87.21	114.48
7818	4 x 4 x 🛧	3/4	5/4	830	117.01	153.01
7819	4 x4 x &	₹8	3/4	820	117.01	153.01
7820	4 x 4 x ½	11/2	1	2150	364.00	476.00
7821	5 x 5 x 🛧	$\mathcal{V}_{8}$	3/4	1210	173.33	226.60



"DI-EN-KEY" Expansion Bolt



Diamond "X" Shield Complete with Lag

# "DI-EN-KEY" Expansion Bolts and Shields

	LIST PP	ce ber 100	D!		•	
Length, Inches	¼ In. \$9.65	A In.	Diameter ¾ In.	of Screw—— ½ In.	⁵% In.	¾ In.
11/2	9.70	\$11.65 11.70	\$13.85			
21/2	9.75 9.80	11.80 11.90	13.85 14.00	\$22.95 23.10	\$30.10 30.50	
<b>4</b>	9.90 10.00	12.05 12.20	14.20 14.40	23.55 23.95	30.90 31.50	\$44.00 44.80
<u>6</u>			14.60	24.40	32.15	45.50
8	• • • • •		14.85 15.10	24.90 25.25	32.75 33.40	46.50 47.00
9	• • • • •		15.30 15.50	25.65 26.15	33.90 34.60	45.00 49.00
11		• • • • • •	15.70	26.55	34.85	49.50
12			15.90	27.00	35.90	50.00

## List per 100 Shields, Without Bolts

	⅓ In.	n In.	⅓ In.	⅓ In.	⅓ In.	¾ In.
	\$9.00	\$10.50	\$12.00	\$19.00	\$25.00	\$35.00
Length shields, inches	1	13/4	2	21/2	21/2	4
Outside diameter size of drill, inches	18	**	#	7/8	1	11/4

# Shields Only—Without Lag Screws Dimensions in Inches

				CIBOLOID III	***************************************					
•			Long St	andard—				—Short St	andard	
Diameter of screw. Length of shield Drill diameter Hole diameter Hole diameter	11/2	1 % 1 % 1 % 1 % 1 % 1 % 1 % 1 % 1 % 1 %	23/4	312	3½ ¾ full	3½ 3½ 1 1	2 1	2 15	2 1	2 1 1

#### Per 100

## Shields Only-Without Lag Screws

Diameter	1/4 in.	# in.	³¼ in.	1/2 in.	% in.	% in.
	\$9.00	\$10.50	\$12.00	\$19.00	\$25.00	\$35.00

#### List per 100

#### Diamond "X" Complete With Lag Screws

Lgth. Ins.	In.	In.	In.	In.	In.		Lgth. Ins.	In.	In.	In.	In.	In.	In.
1½ 2 2½ 3 4 5	\$9.65 9.70 9.75 9.80 9.90 10.00	\$11.65 11.70 11.80 11.90 12.05 12.20	\$13.70 13.85 14.00 14.20 14.40 14.60	\$22.95 23.10 23.55 23.95 24.40	\$30.10 30.50 30.90 31.50 32.15	\$44.00 44.80 45.50	9 10 11 12		Digitize	\$14.85 15.10 15.30 15.50 15.70 15.90	\$24.90 25.25 25.65 26.15 26.55 27.00	\$32.75 33.40 33.90 34.60 34.85 35.90	\$46.50 47.00 48.00 49.00 49.50 50.00

# EXPANSION BOLTS Expansion Bolts and Shields





Shield with Screw

Shield

# MALLEABLE SHIELDS

## Dimensions, Malleable Shields Only

Dia. of screw Outside dia. shield. Length of shield Dia. drill required.	1/4 in.	5 in.	3/8 in.	7 in.	½ in.	5/8 in.	3/4 in.	1∕8 in.	1 in.	11/4 ins.
Outside dia. shield.	½ in.	9 in.	5 in.	11 in.	3/4 in.	⅓ in.	11/8 ins.	$1\frac{1}{2}$ ins.	$1\frac{1}{2}$ ins.	$1\frac{7}{8}$ ins.
Length of shield	$1\frac{1}{2}$ ins.	13/4 ins.	$2\frac{3}{4}$ ins.	$2\frac{3}{4}$ ins.	$3\frac{1}{2}$ ins.	3½ ins.	$3\frac{1}{2}$ ins.	5 ins.	5 ins.	8 ins.
Dia. drill required.	½ in.	16 in.	5∕8 in.	₩ in.	3∕4 in.	1∕8 in.	1½ ins.	13% ins.	1 ½ ins.	$1\frac{7}{8}$ ins.

## List Price per 100 Shields Without Lag Screws

Dia. of screw	1/4 in.	$\frac{5}{16}$ in.	3/8 in.	$\frac{7}{16}$ in.	½ in.	5% in.	3/4 in.	7/8 in.	1 in.	11/4 ins.
List price per 100.	\$9.40	\$10.50	\$13.35	\$17.75	\$22.00	\$27.80	\$39.95	\$53.30	\$66.60	\$100.00
Length, Inches		List P	rice per	100 Sh	ields W	ith Squ	are Hea	d Lag S	crews	-
1½	\$10.13	\$11.60 11.65							.,,,,	
$2 \dots 2 \frac{1}{2} \frac{1}{2} \dots$	10.85 11.00	11.85	\$15.90	\$20.30	\$24.15	\$31.70	\$48.30			
3	11.25 11.50	12.00 12.35	16.10 16.40	20.50	24.45 25.35	32.10 32.90	48.85 50.00			
5	11.85	12.65	16.90	21.15	25.90	33.75	51.05			
7	12.20	13.00 13.30	17.35 17.65	21.50 21.80	26.45 27.00	34.60 35.40	52.20 53.30	70.00	\$79.55 81.65	
8			18.00	22.15 22.50	27.55 28.10	36.25 37.10	54.45 55.55	71.10 72.20	83.70 75.75	\$174.45 181.10

Ten per cent. extra for hexagon heads. In figuring lists for longer bolts than those given above, make same advance per inch as on list.

NOTE: Standard package of all type shields or shield and screws is 100.

#### **COMPOSITION SCREW ANCHORS**

#### With Iron Screws

The following list covers anchors not over 1 inch in length complete with flat, round or oval head iron screws.



Anchor with Screw

Anchor

Diameter	Length	No. of	List Price per 100-Length of Screw					
of Anchor of Anchor		Screw	3/4 In.	1 In.	1½ Ins.	2 Ins.	2½ Ins.	
in	1/2, 5/8, 3/4 in.	5-6-7-8	\$6.10	\$6.20	\$7.50	\$9.50	\$13.35	
	1/2, 3/4, 1 in.	9-10-11	7.90	8.50	9.50	11.00	14.35	
in	1/2, 3/4, 1 in.	12-13-14	9.60	10.50	12.10	13.90	16.10	
	3/4, 1 in.	15-16-17-18	12.25	13.50	16.85	19.85	22.75	

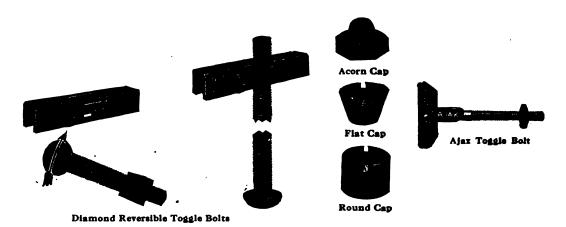
'Note: Standard package of all type shields or shields and screws is 100.

#### ONE PART DIAMOND EXPANSION SHIELDS ONLY

Composition

Composition											
List No.	No. Inches	No. of Screw	Length of Shield	Outside Diam.	List Price per 100	List No.	No. Inches	No. of Screw	Length of Shield	Outside Diam.	List Price per 100
740224 744225 740226 740227 740228 740229 740230 740231 740232 700233	3 x 3/4 3 x 1 3 x 1 3 x 1	5-6-7-8 5-6-7-8 5-6-7-8 9-10-11 9-10-11 9-10-11 9-10-11 12-13-14 12-13-14	1/2 5/8 3/4 1/2 3/4 1 1 1 5/8 1/2 3/4	1/4/4/4/4/1/4/1/4/5/16/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/	\$4.40 4.40 5.00 5.00 5.00 5.00 6.25 6.10 6.10	740234 740235 740236 741540 741541 741542 741573 741473 741474	1/4 x 1 1/4 x 1 1/4 x 2 1/4 x 2 1/4 x 2 1/4 x 2 1/4 x 2 1/5 x 3 1/6 x 1 1/6 x 1 1/6 x 1 1/6 x 1 1/6 x 2 1/6 x 2 1/6 x 2 1/6 x 2	12-13-14 12-13-14 12-13-14 12-13-14 15-16-17-18 15-16-17-18 15-16-17-18 15-16-17-18 15-16-17-18	1 13/8 11/2	3/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8	\$5.60 6.75 7.80 8.95 6.25 6.25 7.20 7.50 8.75

# TOGGLE BOLTS AND WALL BRACKETS



# Diamond Reversible Toggle Bolts

#### List Price per Hundred

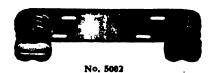
With Screws		With Round or Flat List Head Stove Bolts No.		List No.	With Loose Head Nickel Plate
1 x 3 ins	741543	<b>\$</b> 4.50 <b>74</b> 1553	\$5.00	741563	\$6.00
$\frac{1}{14} \times 3\frac{1}{2}$ ins	741544	4.70 741554	5.20	741564	6.20
1 x 4 ins	741545	5.00 741555	5.40	741565	6.40
$\frac{1}{16}$ x 5 ins	741546	5.20 741556	5.80	741566	6.80
1 x 6 ins	741547	5.70 741557	6.20	741567	7.20
1/4 x 3 ins			6.60	741568	7.80
$\frac{1}{4}$ x $3\frac{1}{2}$ ins	741549	6.50 741559	7.00	741569	8.20
1/4 x 4 ins	741550	6.90 741560	7.40	741570	
1/4 x 5 ins			• • • • •	741571	
½ x 6 ins	741552	8.50 <b>741562</b>	9.60	741572	10.80

# Ajax Toggle Bolts

List No.	Size	List Price per 100	List No.	Size	List Price per 100
	👬 x 3 ins	<b>\$3</b> .84	740298	1/4 x 3 ins	<b></b>
<b>7402</b> 96	👬 x 4 ins	4.08	740299	1/4 x 4 ins	5.28
740297		4.56	740300	1/2 x 6 ins	6.24







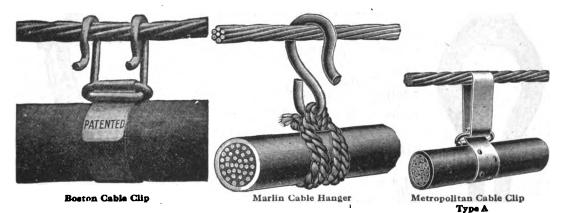
## National Wall Brackets

The designs are distinctive. As it is intended that the wires be run through the ironbound insulators the necessity of using tie-wires has been entirely eliminated, although the design of the insulators is such that the tie-wires may be used when so desired. Under ordinary conditions, however, the wires are simply threaded through the insulators.

List		Std.	Std. Pkg.	List Price
No.		Pkg.	Weight	per 100
5000	Corner chairs	100	30 lbs.	\$12.60
5001	One point bracket	100	70 lbs.	32.20
5002	Two point brackets	50	95 lbs.	67.20
5003	Three point brackets	25	65 lbs.	100.80
5020	Porcelains	100	50 lbs.	15.40
5021	U bolts and nuts	100	6 lbs.	7.00

## Western Electric

## CABLE HANGERS



# **Boston Cable Clip**

Furnished with two sizes of Hooks No. 1 for 1/4 inch Messenger Wire; No. 4 for 1/2 inch Messenger Wire

List No.	Mfr. No.	Length of Strap	Hook No.	*W. E. List per 1000
740569	1	6 ins.	1	\$67.20
740570	2	7 ins.	1	67.20
740571	3	8 ins.	1	67.20
740572	4	$6\frac{1}{2}$ ins.	4	67.20
740573	5	$6\frac{1}{2}$ ins.	1	67.20

# Marlin Cable Hanger

No. 1 Grade

No. 1 grade is an excellent hanger, quality of hemp not quite as good as No. 3. Hooks are made from No. 9 galvanized steel wire.

List No.	Size	Length of Loop	Hook No.	Material	Weight per 1000	†W. E. List per 1000
740574 740575	25 pair 50 pair	9 ins. 11 ins. 12 ins.	9 9 9	2-ply Marlin 2-ply Marlin 2-ply Marlin	30 lbs. 33 lbs. 34 lbs.	\$16.80 18.24 18.96
740576 740577 740578	75 pair 100 pair 150 pair	12 ins. 14 ins. 15 ins.	9 9	3-ply Houseline 3-ply Houseline	40 lbs. 42 lbs.	$\begin{array}{c} 18.90 \\ 22.26 \\ 23.32 \end{array}$
740579	200 pair	16 ins.	9	3-ply Houseline	44 lbs.	24.40

#### No. 3 Grade

No. 3 Grade Marlin Cable Hanger is made in accordance with A. T. & T. Co.'s specifications. The marlin used is 3-ply and is made of the finest quality of selected long line American hemp. The hooks are of No. 9 wire, galvanized by hot dip process after they are formed.

List No.	Size	Length of Loop	Hook No.	Material	Weight per 1000	†W. E. List per 1000
740580	25 pair	9 ins.	9	3-ply Houseline 3-ply Houseline	35 lbs.	\$20.92
740581	50 pair	11 ins.	9		37 lbs.	23.06
740582	75 pair	12 ins.	9	3-ply Houseline	38 lbs.	24.12
740583	100 pair	14 ins.	9	3-ply Houseline	40 lbs.	26.26
740584	150 pair	15 ins.	9	3-ply Houseline	42 lbs.	27.32
740585	200 pair	16 ins.		3-ply Houseline	45 lbs.	28.20

# Metropolitan Cable Clip

Will stand 400 lbs. strain. The steel wire loop is heavily galvanized and the band which encircles both cable and supporting strand is of zinc.

List	-	*List Price	List	*	*W. E. List
No.	Туре А	per 1000	No.	Туре В	per 1000
740592	7 inches	\$60.00   74	40593	7 inches	\$56.00
741783	8 inches	66.00    74	41785	9 inches	66.00
741784	9 inches	72.00			

\*Delivery F. O. B. Boston, Mass. †Delivery F. O. B. Cleveland, O. For warehouse deliveries write nearest house.

Crimping Pliers

# Western Electric

# CABLE ACCESSORIES

### STYLE A CRIMPING PLIERS

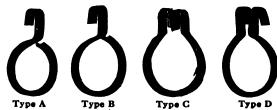
These pliers are for clamping rings to suspension strand. They are made in two sizes. The small size is for rings 2 inches inside diameter and smaller; the large size for 2½ inches and greater.

List No.	Style	List Price Each	
741644	A	Small size for rings 2 inches	
741645	В	and smaller \$4.00 Large size for rings 2½	
141010		inches and greater 5 00	

Note: When ordering state size of strand: 15 inch, 3/8 inch, 1/4 inch or special size.

## DIAMOND CRIMPER

List No.		List Price Each
741659	Crimper complete with three sets of jaws	\$16.80





Crimper

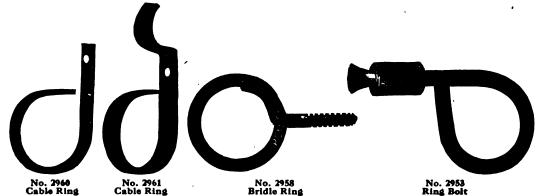
# Galvanized Aerial Cable Rings

Made of steel heavily and smoothly galvanized after forming. They are placed on the strand by a lineman, seated in a cable car or boatswain's chair.

A tool called a crimping plier is used to fasten them to the strand and the cable is then pulled into the suspended rings.

The inside diameter of ring should be from ½ to ¾ inch greater than the outside diameter of cable to be installed.

List	Size, Inches	*List	Price	List	Size, Inches	*List Price
No.	Inside Diameter	Per 100	Per 1000		Inside Diameter	Per 100 Per 1000
	1¾ in. Type A cable rings		\$13.20	740972	21/2 in. Type C and D cable rings.	\$2.97 \$19.80
	134 in. Type B cable rings				3 in. Type C and D cable rings.	
740971	2 in. Type C and D cable rings.	. 2.56	17.05	740974	31/2 in. Type C and D cable rings.	8.96 26.40



Peirce Cable Rings

Cable ring			Price per 100 \$4.96 7.00	List Price Each .07 .10	
BRIDLE RINGS	II RING BOLTS				
Diameter of Eye, Inches Weight, Lbs. List Price \$5.02	No. Es	ameter of ve, Inches	Weight, Lbs.	List Price	
1 10 6.06.1	2950	₹	13	26.62	

7.16 | 2951 8.26 | 2952 9.90 | 2953 †Delivery F. O. B. Pittsburgh, Pa. \*Delivery F. O. B. Everett, Mass. For warehouse deliveries write nearest house.

List No.

2960 **2961** List

No. 2954 2955

2956 2957

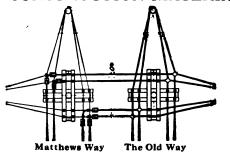
40.00

## CONSTRUCTION MATERIALS



For 34 in. eyebolt...

 $\bar{3}$ 



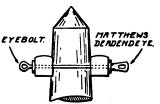


Illustration Showing Eyebolt and Dead End Eye

	Matthews	Cable Cl	amp	‡List Price p	er 100
List		Wt. per		ess 25 to	50 or
No.	Description	100	th	an 25 49	More
740509	For all cables larger than 00 up to and	in-	Plain \$27	0.00 \$260.00	<b>\$250.00</b>
	cluding 2,000,000 C.M	425 lbs.	Galv. 32	0.00 300.00	290.00
List	Matthews Dead I	End Eyes	or Eyer	nuts Weight	IList Price
No.	Description	-	•	Per 100	per 100
1 F	or ½ in. eyebolt	<b>.</b>	<b>,</b>	100 lbs.	\$40.00
2 F	or 5% in eveholt			96 lbe	40.00





..... 92 lbs.

Cable Clamp

"Long-Saut" Combination Cable Clamp

For attaching telephone cables and bridle wires with one fastening to brick or wood buildings, fences, etc. List Outside Diam. | List Price | List Outside Diam. †List Price per 100 No. of Cables No. of Cables per 100 No. 3/8 740165 11/8 \$1.82 \$6.50 00000 740158 7.64 740159 0000 2.15 740166 3A 2.24 740160 000 740167 3 7.64 2.50 740161 00 740168 4 A 8.00 5.00 740169 8.00 740162 0 4 5.62 740170 5 15.00 740163 740164 6.36

Bridle Rings with Machine Threads to Fit Clamps

List		Sold Separately	_	t per 100——
		Sold Separately		Galvanized
No.	~	40 1 8/1		
		10 wire, 3/4 in. eye		<b>\$4</b> . <b>5</b> 0
<b>74</b> 1499	Size M No.	10 wire, 1¼ in. eye	5.78	4.94

DIAMOND EXPANSION SHIELDS OR SCREW ANCHORS TO ATTACH CLAMPS For Nos. 4-0, 3-0 and 2-0 use  $\frac{1}{16} \times 1$  inch anchors, with No. 10 x 1 inch R. H. galvanized wood screws. For Nos. 0, 1, 2 and 2A use  $\frac{1}{16} \times 1$  inch anchors, with No. 14 x 1 $\frac{1}{16}$  inch R. H. galvanized wood screws. For Nos. 3A. 3, 4A, 4 and 5 use  $\frac{1}{16} \times 1$  inch anchors, with No. 14 x 1 $\frac{3}{16}$  inch R. H. galvanized wood.

Bridle Rings

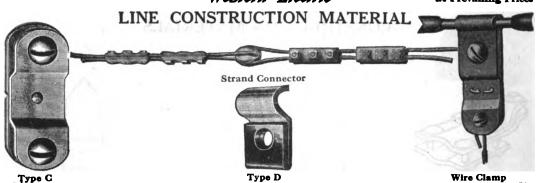
Are for the carriage and distribution of wires. Due to the superior process of enameling, no chafing of wires, absolute smoothness, perfect insulation, and proof against rust are points of distinction.

OHE WILCO	andorate butto	outineed, periee	· IIII	arra broor again	acc acc po	01 010011100	
List	Mfr. No.	Inside Diam.	Width of	Length of Stem	Std.	*List Pri	ce per 1000
No.	Style	of Eye	Opening	Under Ring	Pkg.	Enameled	Galvanized
740171	Å	$1\frac{5}{8}$	16	11/4	<b>500</b>	<b>\$7</b> 3.00	<b>\$36</b> .00
740172	C	11/4	<u> </u>	11/4	500	65.00	31.00
740173	E	5/8	<u> </u>	$\frac{7}{2}$	1000	47.00	24.00
740174	$\overline{\mathbf{F}}$	<b>3</b> ´°	18	11/4	Assorted	145.00	96.00

Enameled furnished unless otherwise ordered.

†Delivery F. O B. St. Louis, Mo. \*Delivery F. O. B. Pittsburgh, Pa., †Delivery F. O. B. Garwood, N.J. For warehouse deliveries write nearest house.

Hook No. 2133



List Diamond Strand Connector Price No. Strand connector, galvanized, for dead ending messenger strands...... 741711 \$0.72 Metropolitan Electric Light Wire Connector 741650 \$16,00 741651 wire No. 6 and larger..... .... Per 100 30.00 O. G. "Long Saut" Ground Wire Clamp
Fastening for Ground Wires to Walls of Brick, Stone, Concrete or Wood 741712 O. G. "Long Saut" ground wire clamp..... Metropolitan Expansion Plug gle Steel ble Rack

Metropolitan Expansion Plugs

For attaching suspension device to brick, stone, cement or any solid wall where a hole is drilled and filled with a wooden plug.

List	Size	List Price	List	Size	List Price
No.		per 1000	No.		per 1000
731655	Expansion plug, $\frac{5}{8}$ x $1\frac{1}{4}$ ins	\$14.50	741657	Expansion plug, 5% x 2 ins	\$15.00
741656	Expansion plug, $\frac{5}{8}$ x $1\frac{3}{4}$ ins	15.00	741658	Expansion plug, $\frac{5}{8}$ x $2\frac{1}{4}$ ins	16.00
	77 1 1 1	יודי זו	" <b>n</b>	.1 10	

# Telegraph and Telephone Pothead Support

Weight per 100 125 lbs. List Price per 100 List No. 9017 On application

# Presteel Cable Rock Sections

	Rack l	Hooks	f	Angle Sto	eel Cable	Racks
2126	18	$1\frac{1}{2}$ ins.	30 ins.	5% in s.	360	application
2125	14	$1\frac{1}{2}$ ins.	24 ins.	5% ins.	290	On
No.	Holes	Spacing	Length	Hole	per 100	Per 100
List	No. of	Hole		Size Bolt	Weight Lbs.	List Price

### Rack Hooks

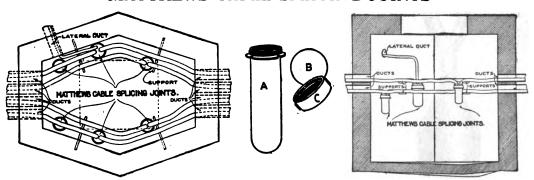
No. 9017

#### Thickness Extension -\*Per 100--\*Per 100from Face List No. of Length . List of Wt., Lbs. Wt., Lbs. No. of Rack, Inches Plate List Price No. Hooks Inches List Price 2131 40 On 9125 530 On 14 30 2132 16 16 86 application 9126 28 60 1060 application 2133 10 112

## Cast Iron Cable Hooks

List	Extension from	No. of		
			****	Tita Dilan
No.	Face of Rack	Cables	Wt., Lbs.	List Price
9131	4 inches	1	90	
9132	7 inches	2	150	On
9133	10 inches	$\bar{3}$	240	application
9134	13 inches	4	Digitized 305 OOGLC	
Line Comment	-41 1/-41-1			

## MATTHEWS CABLE SPLICING JOINTS



# Splicing Joints

This device is designed to take the place of horizontal splices in multiconductor lead-covered cables, and is adapted particularly for underground manholes. The joint consists of three parts as shown in the illustration: "A," lead pot or sleeve, which is lined with galvanized iron to insure stability, and sweated to a threaded brass ring; "C," brass collar internally threaded to fit ring and tinned on upper edges; "B," lead gasket through which cables pass. In attaching, the cables are "wiped in" and the lead sleeve is screwed into the brass collar "C" by means of the spanner wrenches. The threads of ring "A" are well coated with red lead before screwing into collar "C." The completed splice is absolutely moisture-proof, and is readily accessible for line tests or change in multiples. Any lineman can learn to make an absolutely moisture-proof cable joint after an hour's practice on the directions that are furnished with them, avoiding delay in case skilled cable splicers are not obtainable. Matthews Splicing Joints will save their cost in the reduction of maintenance expenses each year.

			Lis	t Price E	ach	Net Addi	tions for D	elivery in
Li <b>st</b> No.	Mír. No.	Description	Less than 25	25 to 49	50 or more	Denver	S'It Lake, Butte	Pacific Coast
740594	1	Will take for straightaway splice any cable up to and including 1 in., outside diameter, for each cable Weight, 3 lbs., inside dimensions, 21/4 x 8 ins.	\$5.80	\$5.60°	\$5.30	\$0.03	\$0.04	\$0.06
740595	2	Will take for straightaway splice any cable up to and including 1½ ins., outside diameter, for each cable Weight, 4 lbs., inside dimensions, 3½ x 8 ins.	7.40	7.00	6.70	.04	.07	.08
740596	3	Will take for straightaway splice any cable up to and including 2½ ins., outside diameter, for each cable Weight, 7½ lbs., inside dimensions, 4½ x 9 ins.	11.50	11.00	10.50	.06	.14	.15
740597	4	Will take for straightaway splice any cable up to and including 234 ins., outside diameter, for each cable	22.00	20.00	18.00	.12	.24	.30

#### SPANNER WRENCHES

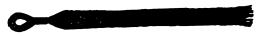
7:4	For			Net Addit	ions for D	elivery in
List No.	Joint No.	Description	List Price per Pair	Denver	S'It Lake, Butte	Pacific Coast
740598 740599 740600 740601	1 2 3 4	Wrench only Wrench only Wrench only Wrench only	\$1.00 1.10 1.50 1.80	\$0.01 .01 .02 .04	\$0.02 .02 .03 .06	\$0.02 .02 .04 .08

Spanner wrenches will only fit the joint for which they are made. Quantities may consist of an assortment of various sizes of joints.

# CABLE GRIPS







Universal Single Eye Cable Grip



Universal Double Eye Cable Grip



Universal Double Eye Split Cable Grip

# Universal Cable Grips -

These cable grips are made in three different styles, as shown in illustrations. The single eye grip is used for attaching the pulling line to the end of the aerial or underground cable.

The double eye grip is designed for a luffing tool, to pull additional cable into a manhole after the single eye grip has been removed. It is invaluable for pulling out old underground cable, leaving it in the best of condition for future use.

The double eye split grip can be lashed on a working cable at any desired point, allowing slack to be pulled without interruption to the service. To determine size of Universal Cable Grips to order, refer to table of measurements.

#### Table of Measurements

Cable Diameter Trakes II Cable Cain Sine

Cable Grip Size	Cable Dia	meter, Inches	Cable Grip Size	Cable Diamete	r, Inches
½ in	For 1/3 i	n. to 5% in.	2 in		23% in.
3/4 in		n. to 1/2 in.	2½ in		2 % in.
1 in		n. to 13% in.	3 in	For 3 in. to	33% in.
1½ in	For 1½ i	n. to 1 1/8 in.	3½ in	For 3 in. to For 3½ in. to	3 1/8 in.
		List Prices		· -	
	Single Eye Grip	l		Single Eye Grip	
List		*List Price	List	*1	List Price
No.	Size	Each	No.	Size	Rach

110.	DIZE	Eacu	1 110.	Dize	Dece
191701	1/2 x 24 ins	\$6.00	191709	½ x 36 ins	\$8.00
191702	3/4 x 24 ins	6.50	191710	3/4 x 36 ins	8.50
191703	1 x 24 ins	7.00	191711	1 x 36 ins	9.00
191704	1½ x 24 ins	7.50	191712	1½ x 36 ins	9.50
191705	2 x 24 ins	8.00	191713	2 x 36 ins	10.00
191706	2½ x 24 ins	8.50	191714	2½ x 36 ins	10.50
191707	3 x 24 ins	9.00	191715	3 x 36 ins	11.00
191708	3½ x 24 ins	9.50	191716	3½ x 36 ins	11.50
	· <del>-</del>		1	· -	
			1		
	Double Eye Grip			Double Eye Split Grip	
191733	• •	<b>\$</b> 8. <b>00</b>	191754	• •	\$9,00
191733 191734	3/4 x 18 ins	\$8.00 9.00	191 <b>754</b> 191 <b>75</b> 5	3/4 x 18 ins	\$9,00 10,00
	3/4 x 18 ins			3/4 x 18 ins	
191734	34 x 18 ins	9.00	191755	3/4 x 18 ins	10.00
191734 191735	34 x 18 ins	9.00 10.00	191755 191756	3/4 x 18 ins	10.00 11.00
191734 191735 191736	34 x 18 ins. 1 x 18 ins. 1½ x 18 ins. 2 x 18 ins. 2½ x 18 ins.	9.00 10.00 11.00	191755 191756 191757	3/4 x 18 ins. 1 x 18 ins. 1 ½ x 18 ins. 2 x 18 ins. 2 x 18 ins. 2 ½ x 18 ins.	10.00 11.00 12.00
191734 191735 191736 191737	34 x 18 ins	9.00 10.00 11.00 12.00	191755 191756 191757 191758	3/4 x 18 ins. 1 x 18 ins. 1 ½ x 18 ins. 2 x 18 ins. 2 ½ x 18 ins. 2 ½ x 18 ins.	10.00 11.00 12.00 13.00

#### Universal Leather Collar Protector

The Universal Leather Collar Protector is for use with single eye grips only. It will prolong the life of the cable grip, as it protects the point of greatest wear.

# Single Eye Grip For 24 Inch and 36 Inch

List No.	Size	*List Price   Each		Size	*List Price Each
				<del></del> -	
191775	1 in	<b>\$4</b> 00	191778	21/6 ins	\$4.30 4.40
101770		41.00			1 445
191776	1½ ins	4.10	1 191779	3 ins	4.447
101		4 66			
191777	2 ins	4.20	171780	$3\frac{1}{2}$ ins	3.04

Delivery F. O. B. Syracuse, N. Y. For warehouse deliveries write nearest house.

## Western Electric

### FIBER CONDUIT











Screw Joint Type



Sleeve Joint Type













Harrington Joint Linaduct

In the process of manufacturing fiber conduit, wet wood pulp or fiber is wrapped in a minutely thin film upon a forming mandrel, under pressure, until the desired thickness of wall is obtained. The individual fibers become felted and form a solid homogeneous wall. Taken off the mandrel, the wet pulp structure is subjected to a drying process, after which it is placed in a vat of liquid compound. This compound is a preservative and is also insulating and waterproofing. It thoroughly permeates the entire structure so that after treatment the wall of the conduit, when cut, presents a strong resemblance to hard rubber. The ends are cut in a lathe to make a socket joint, sleeve joint, or screw thread, as may be desired.

#### THE SLEEVE JOINT TYPE

The ends of each length are turned down to fit snugly in a sleeve by means of which a tight connection is made. The ends of the pipe are squared and faced.

List No.	Inside Dia., Ins.	Thickness of Wall, Ins.	Wt. per Ft., Lbs.	List Price per Ft.		Inside Dia., Ins.	Thickness of Wail, Ins.	Wt. per Ft., Lbs.	‡List Price per Ft.†
740062	*1	1/4	0.40	\$0.28	740066	3	1/4	1.30	\$0.24
740063	11/2	1/4	0.74	.22	740067	31/2	16	2.50	.36
740064	2	1/4	0.90	.22		4	1/2	3.20	.45
740065	21/2	1/4	1.10	<u> </u> .23	l				<u></u>

#### HARRINGTON JOINT TYPE

This type of joint is a modification of our sleeve joint and is made with a tapered end. Sleeves are tapered also, thereby allowing more swing to the conduit than can be secured by other types of joints. In this type the conduit does not butt, in consequence of which more flexibility may be had.

List No.	Inside Dia., Ins.	Thickness of Wall, Ins.	Wt. per Ft., Lbs.	‡List Price per Ft.		Inside Dia., Ins.	Thickness of Wall, Ins.	Wt. per Ft., Lbs.	‡List Price per Ft.†
740069 740070 740071	2 2½ 3	1/4 1/4 1/4	0.90 1.10 1.30	\$0.19 .22 .23	740073	3½ 4	1/4	1.55 1.90	\$0.24 .28

#### THE SCREW JOINT TYPE

This type of fiber conduit is manufactured with a slightly thicker wall than the socket joint type, owing to the necessity of securing a sufficiently heavy structure for carrying the thread that is cut on the ends of the pipe. The thread is "United States Standard"—four to the inch—and a coupling is provided for completing the joint. A liquid compound is furnished by the manufacturer to be wiped on the threads of the pipe when making the connection. This compound hardens and renders the joint watertight.

List No.	Inside Dia., Ins.	Thickness of Wall, Ins.	Wt. per Ft., Lbs.	‡List Price per Ft.		Inside Dia., Ins.	Thickness of Wall, Ins.	Wt. per Ft., Lbs.	‡List Price per Ft.†
740074 740075 740076	*1½ 2 2½	5 16 3/8 3/8 3/9	0.85 1.32 1.65	\$0.30 .33 .33	740078	3 3½ 4	18 18 16 1/2	2.20 2.50 3.20	\$0.42 .48 .60

\*Manufactured only on special order. †Includes one coupling to each length.

# FIBER CONDUIT (Cont'd.)



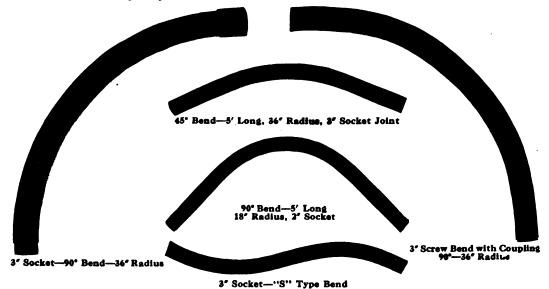
#### **Fiber Conduit**

#### THE SOCKET JOINT TYPE

Socket or mortise and tenon connections are automatically turned on the ends of each length, being  $\frac{3}{16}$  inch long, slightly tapering, and uniform in size. This connection secures laying the conduit perfect in fit and alignment.

List	Inside	Thickness	Wt. per	‡List Price	List	Inside	Thickness of Wall, Ins.	Wt. per	‡List Price
No.	Dia., Ins.	of Wall, Ins.	Ft., Lbs.	per Ft.	No.	Dia., Ins.		Ft., Lbs.	per Ft.
740084 740085 740086 740087	*1 1½ 2 2½	1/4 1/4 1/4 1/4	0.38 0.70 0.85 1.02	\$0.18 .15 .15 .16	740088 740089 740090	3 3½ 4	1/4 1/4 1/4 1/4	1.20 1.45 1.62	\$0.18 .19 .22

<sup>\*</sup>Manufactured only on special order.



#### Fiber Conduit Bends

In producing these bends the conduit is first formed in the usual manner. When the wet pulp structures is removed from the mandrel it is bent on a special form to the radius and degree desired, after which it is dried and thoroughly saturated with an insulating and preservative compound. Special bends of short radii are mitered to give the degree and radii desired.

#### STANDARD BENDS

Inside diameter, ins	1	11/2	2	21/2	3	31/2	4
	Data, 4	5° and 90	)° Bends				
Length, feet	2½ 18	5 18-24-36	5 18-24-36	5 24-36	5 36	5 36	5 36
	Da	ata, "S"	Bends				
Offset, ins	10 8	20 36	20 36	20 36	20 36	20 36	20 36
1	*L	ist Price	Each		Chalifornia		
Socket. *Sleeve. *Harrington. *Screw. †Linaduct.	\$2.25 2.46	\$2.55 2.85 4.65	\$2.55 2.85 2.85 4.80 2.62	\$2.62 3.00 3.00 4.80 2.70	\$2.70 3.15 3.15 5.25 2.85	\$3.00 5.76 3.45 5.85 3.15	\$3.36 6.96 3.90 7.05

<sup>\*</sup>Price includes couplings. †1/4 inch wall.

Delivery F. O. B. Orangeburg, N. Y. For warehouse deliveries write nearest house.

## FIBER CONDUIT FITTINGS









Coupling

Reducer

Tee

Elbow

## Fiber Fittings

These fittings are made throughout of the same material as is used in the manufacture of fiber conduit

and possess the same extremely high insulating qualities of that conduit.

In making these fittings the conduit is first formed and dried in the usual manner. It is then shaped into different forms of fittings, after which it is thoroughly saturated with the insulating and preservative compound.

Joints are then cut'in a lathe to make a socket, sleeve or screw connection.

•			tLis	t Price	Each		
Inside diameter, ins	1	11/2	2	21/2	3	31/2	4
	(	COUPLIN	IGS				
Sleeve		\$0.13  .18 .10	\$0.15 .15 .20 .12	\$0.18 .16 .24 .13	\$0.21 .18 .27 .15	.21 .36	\$0.42 .24 .45 .18
	CA	PS OR P	LUGS				
SocketSleeveScrew	\$0.39 .39	\$0.39 .39 .45	\$0.42 .42 .48	\$0.45 .45 .51	\$0.51 .51 .57	.60	\$0.75 .75 .78
. •	1	REDUCE	RS				
	1	Largest E	ind				
Socket		\$0.60 .63 .63 .66	\$0.63 .66 .66 .69	\$0.69 .72 .72 .75	\$0.75 .78 .78 .81	.87	\$0.93 .96 .93 .99
		CROSSE	S				
*All types	<b>\$4.28</b>	\$4.42	\$4.58	\$4.74	\$4.86	\$5.16	\$5.95
		TEES					
Socket *Sleeve *Harrington *Screw	3.22	\$2.46 3.00  3.30	\$2.46 3.00 3.00 3.45	\$2.62 3.15 3.15 3.52	\$2.70 3.30 3.30 3.66	3.82 3.52	\$3.36 4.35 4.45 4.42
ELBOWS							
Socket. *Sleeve. *Harrington. *Screw.	2.10	\$1.61 1.95 2.02	\$1.61 1.95 1.95 2.16	\$1.72 2.02 2.02 2.25	\$1.80 2.10 2.10 2.32	\$1.95 2.40 2.25 2.46	\$2.25 2.70 2.55 2.76

<sup>\*</sup>Price includes couplings.





### Junction Boxes

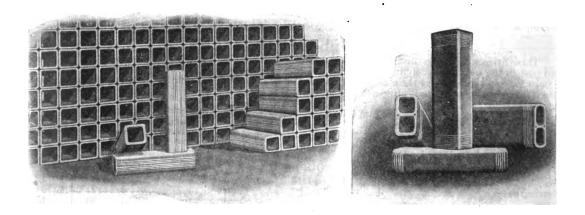
Fiber Junction Boxes can be used with either screw, sleeve or socket joint conduit. They are especially recommended for service connections and where it is necessary to light up private roads. These boxes are made two, three and four way. The inside dimensions are, approximately, 8 x 8 inches, and the weight is 16 pounds.

List		List Price
No.		Each
<b>7417</b> 06	Junction Box, one to four openings	\$9.90

Always specify number of openings wanted, and type of conduit with which junction box is to be used. †Delivery F. O. B. Orangeburg, N. Y. For warehouse deliveries, write nearest house.

#### VITRIFIED CLAY CONDUIT

This conduit is made of the purest fire-clay, salt glazed, and guaranteed to comply rigidly with the American Telephone and Telegraph Company's specifications. We inspect all conduit as it is loaded. Conluit is manufactured in all standard sizes and designs, and includes some special economic forms.



Single Duct Conduit: May be obtained in either of two forms: the square or round duct. The square duct single is heavier and has no real advantage over the round duct single. The round duct is now the popular single duct conduit. Its weight is much less, thus saving on freight. It is especially efficient in building up trunk lines, the beveled corners allowing square interstices between the pieces, thus forming an additional concrete support, and insuring good alignment before and after cable pulling.

Two-way and Three-way Multiple Conduit can only be manufactured in 2 foot lengths, and is lesigned for building up trunk lines to the desired capacity of laying singly in the trench for terminal and ateral construction.

# VITRIFIED CLAY CONDUIT

Is the most satisfactory conduit made, strong in the web, straight in line, smooth in the duct, and lat on the ends. This ware is the most economical per duct foot to lay in the trench.

Styl <b>e</b>	Length of Piece, Feet	Duct Feet in Piece, Feet	Weight per Duct Foot	Duct Diameter Inches	Duct Feet Minimum Cor.	Price per Duct Foot
Square Duct, Single Round Duct, Single P-Way Multiple P-Way Multiple P-Way Multiple P-Way Multiple P-Way Multiple P-Way Multiple P-Way Multiple	1.5 1.5 2 2 3	1.5 1.5 4 6 12 18 27	10 8 8 8 7.50 7.50 7.50	31/2 31/2/33/8 33/8 33/8 33/8	4278 5000 6250 6250 7800 7800 7800	Prices on Applica- tion

#### STANDARD WOODEN CONDUIT

This pine "pump-log duct" is largely used by telephone companies with underground lead-covered able; it is creosoted, and, therefore, there is no limit to its life; the price is moderate, freight is low, break-ge is very slight, cost of laying is low; dimensions, square,  $4\frac{1}{2} \times 4\frac{1}{2}$  inches outside; hole, 3 inches.

Prices on application.



Shovel (Eastern Rattern) Spoon (Western Rattern) Spade (Square D Handle) Scoop (Square D Handle)

Standard Long Handle Shovels

The Standard shovel is furnished with either D or long handle (D handle is 27 inches long, 4½ feet from top of blade to top of handle), furnished in either polished or black finish, round or square point and with plain back (welded) or back strap (riveted).

List No.

Square D, round point or square point.

Square D, round point or square point.

Square D, round point or square point.

Square D, round point or square point.

Telephone or Telegraph Shovels

These shovels are from 6 to 8 feet in length with round point (blade straight with handle, no lift), plain back finished in ack; has strap regularly 9½ inches with extra long strap above 9½ inches to 28 inches. inclusive.

DIBER, III	total regularity by 2 menes with out a rough	List Price	1	o to no monda, mondati o	List Price
Length			Length		per Dos.
6 ft.	With 91/2 in. strap			With 28 in. strap	
7 ft.	With 91/2 in. strap		7 ft	With 28 in. strap	45.00
8 ft.	With 91/2 in. strap	45.00	8 ft	With 28 in. strap	49.00

Standard Spoons

		rickarer roana bom	to (Dastern pattern) or hat toe (Western patte	· · · · · · · · · · · · · · · · · · ·
plain back	in black finish.		•	
6 ft.	With 91/2 in. strap	\$44.00    6 ft.	With 28 in. strap	
7 ft.	With 91/2 in. strap	44.00    7 ft.	With 28 in. strap	48.00
8 ft.	With 9½ in. strap	48.00    8 ft.	With 28 in. strap	<b>52</b> .00
	- · · · · - · · · · · · · · · · · · · ·		<u>-</u>	

	Standard Spades	
List		List Price
No. 2	D or leng handle, square point	Per Doz. \$29.00

D or long handle, square point. ..... Standard Scoops

	These scoops are made with D or	long handles, square point, back strap furnished black	or full polish.
2	D or long handle, black finish.	,	
3	D or long handle, black finish.		
4	D or long handle, black finish.		
5		• • • • • • • • • • • • • • • • • • • •	
	SPOON HANDLES	SHOVEL HANDLES	SQUARE D HANDLES

SPUUN	NANDLES	2110455	IIANDLES	SQUARE D HANDES
	List Price		List Price	List Price
Length	Γer Doz.	Length	per Dos.	per Doz.
6 ft	\$12.00	6 ft		Regular grade \$6.25
		7 ft	14 . 62	Extra grade 5.62
	16 . 38	8 ft	17.00	_
	19 . 00	9 ft	19.62	1
	25.12	10 ft	24.50	·
	28.25	12 ft	27.62	C I -
Delivery F	O B Factory Anderson	Ind. For warehou	se deliveries write negrest	house 1 -(10012

# DIGGING AND TAMPING BARS



Plain Digging Bar

Crow and Digging	Bar
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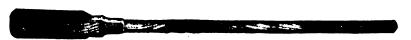
	Crow and Digging Bar					
No. 1060 1061 1062	List Price Wgt. Each 1 in. octagon. 6 ft. long 17 lbs. \$7.30   1063   1½ in. octagon, 6 ft. long 1 in. octagon, 7 ft. long 20 lbs. 8.20   1064   1½ in. octagon, 7 ft. long. 11½ in. octagon, 8 ft. long 23 lbs. 9.00   1065   1½ in. octagon, 8 ft. long.	. 26 lbs. 10.50				
	Tamping and Digging Bar					
1070 1071 1072	1 in. octagon, 6 ft. long 17 lbs. \$9.00   1073   1½ in. octagon, 6 ft. long. 1 in. octagon, 7 ft. long 20 lbs. 9.60   1074   1½ in. octagon, 7 ft. long. 1 in. octagon, 8 ft. long 23 lbs. 10.50   1075   1½ in. octagon, 8 ft. long.	. 26 lbs. 10.90				
	Plain Digging Bar	•				
1080 1081 1082	1 in. round, 6 ft. long 16½ lbs. \$4.50    1083    1½ in. round, 6 ft. long 1 in. round, 7 ft. long 19 lbs. 6.00    1084    1½ in. round, 7 ft. long 1 in. round, 8 ft. long 21½ lbs. 7.60    1085    1½ in. round, 8 ft. long	. 24½ lbs. 8.40				
	Digging Spud with Tamper					
	Digging Spot with Tamper					
	Blectric Tamping Bar	<b>7</b>				

## Loy or Slick

# Digging Spud With Tamper

List No. 852	Digging spud with tamper, 9 ft. long	Weight per Doz. 234	List Price Each \$7.20
1044	Electric Tamping Bar Electric tamping bar, 8 ft. long	•••	<b>\$</b> 6.00
853	Loy or Slick Loy or slick, 8 ft. handle	210	\$7.00

Tamping Bar with Heavy Iron Shoe



Tamping Bar with Extra Heavy Iron Shoe

# Tamping Bar

	WITH HEAVY IRON	SHOE			WITH EXTRA HEAVY IR	
List No.		Wgt. per Doz.				Wgt, List Price per Dos. Each
854 855	Tamping bar, 7 ft. handle. Tamping bar, 8 ft. handle.	150 lbs.	. \$3.20	1054	Tamping bar, 7 ft. handle. Tamping bar, 8 ft. handle.	160 lbs. \$3.60

\*Delivery F. O. B. Oshkosh, Wis. For warehouse deliveries write nearest house.

# CONSTRUCTION TOOLS AND SPECIALTIES





	REGULAR PATTERN	-	E	KTRA HEAVY WITH STEE	L SWIV	ELS
List No. 295 297	Weight List per Doz.  4 ft. maple handle	Each \$3.80	List No. 299 300	6 ft. maple handle	Weight Liper Doz. 155 lbs. 165 lbs.	Each
	Wester	n Un	ion	Pattern		
800 801	4 ft. maple handle 135 lbs. 5 ft. maple handle 150 lbs.	\$4.80 5.20	802 803	6 ft. maple handle 7 ft. maple handle	165 lbs. 175 lbs.	\$6.00 7.00
•						

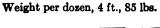


	Cant	Hook
2		

List No.	Malleable Socket Peavies  With 4 ft. select maple handle	Weight per Doz.	List Price Each \$4.50
124	With 4 ft. select maple handle	110 lbs.	<b>≱</b> 4.50
137	With 4 ft. select hickory handle	110 lbs.	6.00
	Cant Hooks		

List	Handles 4 ft. select maple handle	List Price
No.	Handles	Each
188	4 ft. select maple handle	\$3.20
189	4½ ft. select maple handle	3.40
	•	i i

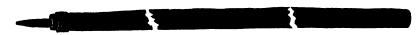
List Price
No. Handles Each
199 4 ft. select hickory handle. \$3.80
200 4½ ft. select hickory handle. 3.80



Weight per dozen, 41/2 ft., 90 lbs.



Pike Poles Nos. 805-816



Western Electric Pattern Nos. 818-824

# Washington Fir Pike Poles

## Standard Small Size

List No. 805	Weight           Handles         per Doz.           10 ft	<b>\$</b> 2.00 <b>807</b>	Handles 14 ft	
806	1210	2.20 )) 600	10 10	100 105. 0.00
	Star	ndard Heav	y Size	
809 810 811 812	10 ft       80 lb         12 ft       100 lb         14 ft       120 lb         16 ft       140 lb	s. 3.10   814 s. 3.50   815	18 ft	200 lbs. 5.20 230 lbs. 6.20
	Weste	rn Electric	Pattern	
818 819 820 821	12 ft	s. 3.80 823 s. 4.30 824	20 ft	260 lbs. 6.50

Delivery F. O. B. Factory, Oshkosh, Wis. For warehouse deliveries write nearest house.

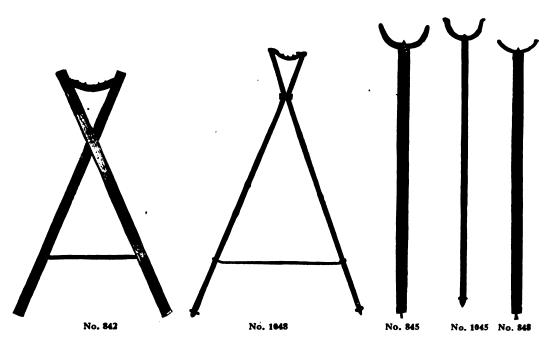
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# CONSTRUCTION TOOLS AND SPECIALTIES



# Guarded Pike Poles

832 10 ft., 13, 833 12 ft., 13, 834 14 ft., 13, 795 16 ft., 13, 796 12 ft., 23,	e, Washington Fir	120 lbs. 140 lbs. 160 lbs. 165 lbs.	3.80 4.20 4.60 4.60	835 836 837 798 799	Handle, Washington Fir 16 ft., 2¼ ins. 18 ft., 2¼ ins. 20 ft., 2¼ ins. 22 ft., 2¼ ins. 24 ft., 2¼ ins.	210 lbs. 235 lbs. 250 lbs.	5.30 5.50 6.00
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# Pole Supports

	<b>WOODEN JENNEY POLE S</b>	<b>UPPOR</b>	TS		IRON JENNEY POLE SUPPORTS	
List No. 842	6 ft., 2½ x 3 ins	Weight 39 lbs.	List Price Each \$10.80	List No. 1048	Weight 6 ft. pole support 32 lbs. \$1	List Price Each 18.50
843 844	7 ft., $2\frac{1}{2}$ x $3\frac{1}{2}$ , ins	57 lbs.	11.80	1049	7 ft. pole support 34 lbs. 1 8 ft. pole support 53 lbs. 2	9.50
	WOODEN MULE SUPP	ORT	i i		IRON MULE SUPPORT	
845 846 847	6 ft., 3½ in. diam	26 lbs.	9.70	1046	6 ft. mule pole support 32 lbs. \$1 7 ft. mule pole support 35 lbs. 1 8 ft. mule pole support 39 lbs. 1	7.00

## Standard Dead Man

#### WESTERN ELECTRIC PATTERN

### PAY-OUT AND TAKE-UP REELS



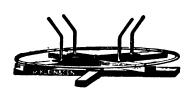
No. 4602-1 Double Deck Pay-out Reel



No. 4601-1. For Telephone Work. Wood, Select Maple No. 4601-2. For Electric Light, Telegraph Work, etc. A Heavier Reel than No. 385A. Wood, Seasoned Oak



Shoulder Strap for Carrying Pay-out Reel



No. 4600-1 Common¶Pay-out Reel

#### Pay-out Reels

List	•	Weight	*List Price
No.		Lbs.	Each
4602-1	Klein Double Deck Pay-out Reel on barrow		<b>\$45.00</b>
4601-1	Klein Pay-out Reel on barrow for telephone work	90	21.50
4601-2	Klein Pay-out Reel on barrow for electric light work	80	25.00
5306	Leather Shoulder Straps for carrying pay-out reel (per set)	43/4	20.80
4600-1	Klein Common Pay-out Reel without barrow for wagon reels	40	12.50

Above reels are substantially built of hard wood, disk reinforced with steel plates. The guard pins are adjustable for standard 12 inch, 18 inch or 24 inch coils. Built to stand hard usage,



No. 4608-1 Improved Take-up Reel



No. 4608-2

## Klein's Improved Take-up Reels

Take-up Reel, seasoned oak. All braces bolted. Removable side piece on spool to allow the coiled wire to be unloaded. The turned axle makes the reel light running. The unloading feature makes it economical in time. And in addition to being so well constructed, the improved take-up reel has a separate guard piece slipped on shaft and fastened with a flat key, allowing wire to be removed quickly and easily.

List		Weight	*List Price
No.		Lbs.	Each
4608-1	Improved, for 18 in. coil	62	\$30.00
4608-2	Improved, for 21 in. coil	65	30.00
40.1	E O B Fratam Chicago III Franches Alimin mit Gat	LI	

\*Delivery F. O. B. Factory, Chicago, Ill. For warehouse deliveries write nearest house.

## REELS, REEL JACKS AND CABLE CARS



Folding Take-up Reel



Folding Take-up Reel Closed

## Take-up Reels

List No.	•	Weight Lbs.	*List Price Each
895	Folding, for 12 in. coil	39	\$18.10
896	Folding, for 18 in. coil	40	18.60
897	Folding, for 21 in. coil	41	19.00
898	Folding, for 24 in. coil	42	19.50



W. E. Cable Reel Jack Front View



W. E. Cable Reel Jack Side View

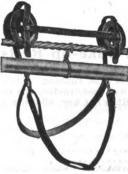


No. 4700-1 Cable Reel Jack

## W. E. Cable Reel Jack

List No.		Weight Lbs.	‡List Price per Pair
760184	W. E. Cable Reel Jack	150	\$64.00
4700-1	Cable Reel Jack, 2 in. x 16 in., with jack screw	82	34.00
4700-2	Cable Reel Jack, with ratchet screw	90	<b>5</b> 0.00





Cable Car No. 3

## Security Messenger Cable Cars

List No.	Description	Weight Lbs.	†List Price Each
1	With adjustable seat and table.	53	\$23.00
1	With adjustable seat, no table.	. 37	15.00
3	Without safety strap	28	7.90

\*Delivery F. O. B. Factory, Oshkosh, Wis. †Delivery F. O. B. Factory, Toledo, O. ‡Delivery F. O. B. Factory, Chicago, Ill. For warehouse deliveries write nearest house.

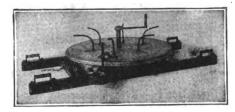
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#### TAKE-UP AND PAY-OUT WIRE REELS









No. 4609-102 Combined Take-up and Pay-out Wire Reel

## Combined Take-up and Pay-out Auto Truck Wire Reel

This combination reel is made with No. 12 galvanized sheet steel disc, 28 inches in diameter, and has the same labor saving features as the combination reel No. 4609-102. By simply reversing the ends of the T axle in the socket of the base the reel is changed from a horizontal to a perpendicular position for either taking-up or paying-out wire. The T axle turns in the socket of the base so that the reel will take up wire in any direction without turning the auto truck. It is especially adapted for railway signaling, telegraph and telephone departments.

List			*List Price
No.		Weight	Each
4609-104	Combined take-up and pay-out reel (reel disc, 28 inches)	57 lbs.	\$51.20

## Combined Take-up and Pay-out Wire Reels

No. 4609-102

Heretofore most telephone, telegraph and electric light companies used separate reels, one to pay out and one to take up. These new combination reels will fill both of these requirements and will do it better and in less time. The reel disc proper instead of being made of wood is of No. 10 galvanized sheet steel; is 34 inches in diameter and has a 1 inch flange turned around the edge. The axles are made from  $\frac{7}{6}$  inch cold rolled steel with cast iron hub bored to fit. Weight of the reel about eighty lbs.

No. 4609-108 reel has the same labor saving features as the No. 4609-102 and has the added advantage of being mounted on wheels, making it very convenient for one man to handle.

· ·	•		
List			†List Price
No.		Weight	Each
4609-102	Combined take-up and pay-out reel (reel disc 34 ins.)	91 lbs.	\$52.50
4609-102	Same as the No. 4609–102, but is mounted on wheels	129 lbs.	68.70
4000-100	Large wire guide for barbed wire (extra)		4.00



The Wasson Reel

#### Wasson Reels

List	*List Price
No.	Each
760209 Wasson single reel and cart	
760210 Wasson double reel and cart	40.00
760211 Wasson single reel, less cart, with axle and	12.00
tension	
760212 Wasson cart, less reel, with axle and tension	16.00

\*Delivery F. O. B. Factory, Chicago, Ill. †Delivery F. O. B. Factory, Oshkosh, Wis. For warehouse deliveries write nearest house.

8-2

## "DICKE" REELS, LINE CART AND TRACK DOLLY



Improved Reel



No. 402 Improved Wagon Reel

#### PAY OUT REELS

No. 402 Improved wagon reel. Can be bolted on any wagon box, platform or fence post for putting up wire fences.

Isist No.		WŁ	*List Price Each
401	Improved Reel	95 lbs.	\$21.50
402		37 lbs.	16.50



No. 409 Tool Cart



No. 408 Track Dolly

#### TOOL CART

#### **Dimensions**

Main box, 6 feet 2 inches x 30 inches deep. Lower tool box, 33 x 30 x 8½ inches deep.

Side tool box, 5 compartments, 5 ft. 10 inches x 6 inches wide, 10 inches deep.

Front tool box 30 x 6 x 10 inches

	1 Tobe tool box of x o x To Inches.		
List			*List Price
No.		Wt.	Each
409	Tool Cart	920 lbs.	<b>\$375.00</b>

#### TRACK DOLLY

With the use of one rail, two men can move poles to any desired place. The wheels are iron and fit standard rails. This tool can also be used in pairs to move a load of poles, by laying two across and piling any amount desired.

List		*List Pr	
No.		Wt.	Each
408	Track Dolly, 4 x 2 ft, x 15 in	225 lbs.	\$78.00

#### JUMPER WIRE REEL

The Jumper Wire Reel was especially designed for use in telephone exchanges. List Price List

Wt. Each No. \$29.00 403 Jumper Wire Reel...... 40 lbs. \*Delivery F. O. B. Factory, Downers Grove, Ill. For ware-

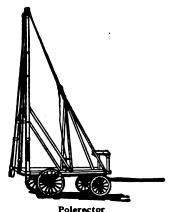
house deliveries write nearest house.

**Tools and Construction Appliances** 

No. 403

Jumper Wire Reel

#### POLE DINKEYS AND REEL WHEELS





No. 306 Dicke's Heavy Pole Dinkey

#### Mathews Polerector

List No. 762500

#### Dicke's Light Pole Dinkey

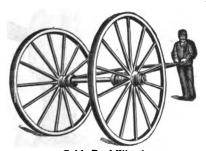
A strongly built truck, especially useful for handling poles which are to be set in places that cannot be reached with a team. One man can easily handle the heaviest pole with this truck.

List	. 1	Weight	*List Price
No.		Lbs.	Each
305	Dicke's Light Pole Dinkey, wheel 2 ft. 8 ins. high with 10 13/8 in. spokes	165	<b>\$</b> 59.60

#### Dicke's Heavy Pole Dinkey

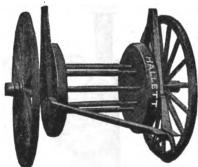
A very strongly built dinkey that is indispensable to telegraph and telephone companies who handle large poles.

List		Weight	*List Price
No.		Lbs.	Each
306	Dicke's Heavy Pole Dinkey, wheels 25 ins., with 14 spokes	330	\$117.00



Cable Reel Wheels

List



Steel Line Cart

#### Cable Reel Wheels

List No.	•	†List Price Each
760188	Pair of 6 ft. wheels, with 6 ft. reel barOne adjustable tongue	

Steel Line Cart

No.
760190 For coiling up wire rope; by turning the tongue over the cart it brings the standard against the ground, which will raise the wheels from the ground, thus making the cart

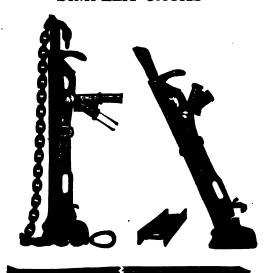
immovable while in use; made either with a steel or oak reel. \$78.76

\*Delivery F. O. B. Factory, Downers Grove, Ill. †Delivery F. O. B. Factory, Harvey, Ill. For warehouse deliveries write nearest house.

†List Price

Each

#### SIMPLEX JACKS



No. 318 Simplex Pole Jack

## No. 318 Simplex Pole Jack

Single acting—operating on the down stroke of lever, or tripping at any point.

This jack has been especially designed for pulling, reinforcing and straightening telephone, trolley and lighting poles. "It pivots on its base," and lifts the largest pole from solid ground in but a fraction of the time required by former methods.

The pivoting base allows the jack to follow the angle of the pole with pressure exerted constantly. The recessed cap into which any of the links of the chain are dropped, holds firmly under every load. The double lever socket insures a convenient position of the lever bar, no matter the angle of inclination of the jack.

Standard Equipment. Eight feet of heavy chain with pear link attached. Five feet steel lever bar, pinch bar construction. Two feet of 10 inch, 25 lb. 1 beam base support to prevent slipping. Capacity Tons Height -Weights List Lift List Price Chain Bar Total Wt. Jack Each No. Inches Inches 318 15 24 39 90 lbs. 34 lbs. 17 lbs. 189 lbs. \$70.00



No. 1. Track Jack



No. 36. Automobile Jack



No. 38. Automobile Jack

#### Automobile Jacks

No. 36. Single acting. Operating on the down stroke of the lever. For the light pleasure car.

No. 38. Single acting. Operating on the down stroke of the lever. For the medium weight pleasure car.

CIIC I	CVCI. I OI UI	ic micarani		picaraio		
List		Capacity	Lift		Weight Lbs.	
No.	Style	Ĺbs.	Inches	Inches	with Pole	Each
36	Automobile	1000	10	61/2	5	<b>\$2</b> .00
38	Automobile		101/6	6	61/2	3.66

Simplex Track Jacks

List No. 1	Style Track jack	Capacity Tons 10	Lift Inches 13½	Height Inches Digi 25ed by	Weight With Pole	List Price Each \$12.60
			81	Tools	and Construction	n Appliances

## Western Electric

#### CONSTRUCTION TOOLS







No. 2000-30. Cable Roller

#### Western Union Cable Reel Stand

In the ratchet reel stands the frame is made of one-inch angle iron, brace of 1 x ½ inch steel bars. Size of screw, 2 inches. Length of screw, 12 inches. Height of stand, only 16 inches. Height of stand to bearing point in yoke, 20 inches. Length of base, 27 inches. Width of base, 12 inches. Weight of stand, 58 lbs. Raise of clearance 37 inches.

	"List Price
·	per Pair
Ratchet adjustable cable reel, without wood base	\$90.00

#### "Matlock" Cable Roller

This cable roller frame is of forged mild steel. The maple roller has a metal bushing extending beyond each end. This prevents the wear on the roller and keeps it in the centre of the frame.

List		Weight	†List
No.		Lbs.	Price
	Cable roller with wooden roller		\$4.00 5.00

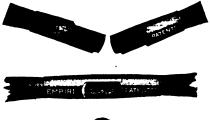
#### Manhole Skids and Sheaves



A tool for leading the pulling line from the mouth of the duct to the capstan. The skids have pin holes every three inches from top to bottom so that the sheaves can be moved any place desired in the skid. Nine foot sets furnished unless otherwise ordered.

††List Pric	æ Each
Nine-foot skids, per set	64.00
Price for additional lengths, per foot	3.20

## **Empire Duct Rods**





Empire Duct Rode

These rods are constructed of malleable iron machined to a perfect fit so that side or end play is avoided. The wooden rod is of the best selected straight-grained wellseasoned hickory, and is expanded in the end of the iron coupling by means of a wedge which makes it impossible to pull out.

The rods are made in two styles, without wheels and with wheels. In the wheel type the wheels are so staggered that if one axle should come in contact with an obstruction on one side of the duct the other side will remain free.

With	Wheels	Without Wheels		
	List Price		List Price	
Length	per Rod	List No.	per Rod	
3 ft.	\$2.20	<b>7</b> 60178	\$1.75	
4 ft.	2.36	76017 <b>9</b>	2.00	

\* Delivery F. O. B. New York City. † Delivery F. O. B. Factory, Chicago, Ill. †† Delivery F. O. B. Factory, Harvey, Ill. § Delivery F. O. B. Factory, Garwood, N. J. For warehouse deliveries write nearest house.

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No. 9120

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Each

#### CONSTRUCTION MATERIAL



Manhole Cover Lifters

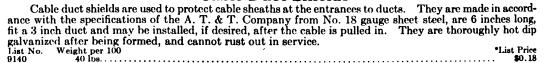
The wood handle manhole cover lifter is made of clear, straight grained hickory, with forged steel fittings, and is 4 feet long.

The Steel Lifter is preferred by many inspectors on account of its light weight and convenience. It is 2 feet 6 inches long, and is made of ½ inch octagonal steel, with a foot of the proper shape to allow a heavy round manhole lid to be lifted with little exertion.

List		Weight	,	*List Price
No.	Туре	Lbs.		Each
9110	Wood	71/2	On	application
9115	Steel	5	On	application
				8



Cable Duct Shields



Pulling-in Irons for Manholes

Pulling-in irons are set into the concrete or brick walls of street vaults opposite all duct entrances to provide a convenient and strong attachment for the pulling-in blocks for installing or removing cables. They are made of 1 inch steel in accordance with The Bell Company's specifications, extend from the wall 8 inches, and are so designed as to straddle one brick. They are not galvanized.

On application



Duct Rods

#### Diamond Screw Duct Rod

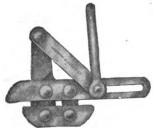
This form of duct rod is furnished with cast bronze couplings, hickory sticks 1 inch diameter and furnished with either octagonal or round sticks. They lack the quick acting features of the automatic couplings used in the Empire Duct Rods, but are used with good results by a number of telephone companies who prefer this type.

1 5			N	<b>⁄I</b> anhole	Ladders		
H	Gal	Ivanized St	eel Manhole	Ladders a	re made to the s	pecifications	of the larg
1 1	telephor	ne and cent	ral station	companies.	They have sides	of 2 x 3/8 in	nch flat and
Н	rungs of	f 5% inch ro	und open h	earth steel.	The rungs pass t	hrough the s	ides and ar
1 1	riveted	over on the	outside.	•	, <b>o</b> .	Ŭ	
	List	No. of	Rung			Weight	*List Pric
	No.	Rungs	Spacing	Width	Length	Lbs.	Eac
1 1	9100	5	15	14 ins.	6 ft.	37	j
	9101	5	15	14 ins.	6 ft. 3 ins.	381/2	
	9102	5	15	14 ins.	6 ft. 6 ins.	40	۱ ۵-
	9103	5	15	14 ins.	7 ft.	<b>42</b> 49 55	On
<b>—</b>	9104	6	15	14 ins.	8 ft.	49	applica
	9105	7	15	14 ins.	9 (t.	55	tion
1 1	9106	8	15	14 ins.	10 ft.	61	1
$\vdash$	9107	. 9	15	14 ins.	· 12 ft.	73	
	9108	11	15	14 ins.	†Delivery F. O.	86	

#### **BUFFALO GRIPS**



No. 1 Closed



No. 1 Showing Jaws Locked Open

## **Buffalo Grips**

Made in the Following Types and Sizes

The jaws may be clamped open at any width, the grip held in one hand and the wire inserted, no matter in what position the lineman may be.

The harder the pull the firmer it grips, yet it does not injure the wire or insulation.

Grip No.	Description	Grip Only
1 2	Extreme opening of .22 inch, holding wire from smallest size to No. 6, inclusive. Extreme opening of .35 inch, holding wire from smallest size to No. 0, inclusive.	\$5.00 7.50
3	Extreme opening of .48 inch, holding all sizes of wire from smallest size to No. 0000, inclusive.	11.00
4	Extreme opening of .52 inch, holding weatherproof wire, sizes No. 6 to No. 1, inclusive.	7.50
5	Extreme opening of .68 inch, holding weatherproof wire, sizes No. 4 to No. 0000, inclusive.	9.00
6	Extreme opening of .27 inch, holding weatherproof wire, sizes No. 14 to No. 8, inclusive.	4.70



No. 4 with Pulley



No. 1 Lineman's Tool

# Buffalo Grips with Pulleys Made in the Following Types and Sizes

Grip No.	Description	Grip with Pulley
1	Extreme opening of .22 inch, holding wire from smallest size to No. 6, inclusive.  Will accommodate sash cord 1/4 inch in diameter.	\$6.60
2	Extreme opening of .35 inch, holding wire from smallest size to No. 0, inclusive.  Will accommodate rope 3/8 inch in diameter.	8.50
3	Extreme opening of .48 inch, holding all sizes of wire from smallest size up to No. 0000, inclusive.  Will accommodate sash cord 3% inch in diameter.	12.00
4	Extreme opening of .52 inch, holding weatherproof wire, sizes No. 6 to No. 1, inclusive.  Will accommodate sash cord 3 inch in diameter.	8.50
5	Extreme opening of .68 inch, holding weatherproof wire, sizes No. 4 to No. 0000, inclusive.	8.30
_	Will accommodate sash cord 3 inch in diameter.	9.50
6	Extreme opening of .27 inch, holding weatherproof wire, sizes No. 14 to No. 8, inclusive.	
	Will accommodate sash cord 1/4 inch in diameter.	6.20

## Buffalo Lineman's Tool

Extreme opening of .22 inch, holding wire from smallest size to No. 6, inclusive.  Extreme opening of .35 inch, helding wire from smallest size to No. 0, inclusive.	
Extreme opening of .52 inch, holding weatherproof wire sizes No. 6 to No. 1, inclusive.	\$12.50 13.70

#### LINEMEN'S TOOLS



## Klein's American Grip

The American Grip Wire Clamp is made of steel. It is light and compact and takes up but little space between the blocks and wire, thus allowing the greatest amount of slack within lineman's reach to be brought up. It is operated with one hand, is easily placed on the wire and is self locking by spring pressure and readily released.

This grip is equally efficient on iron or copper wire. The jaws are parallel and perfectly smooth and will positively not injure the wire. The draft being close on the center, it will pull straight and not kink the wire. Galvanized finish.

List		Weight	List Price
No.		Lbs. Each	Each
1602-10 1602-20	For No. 6 wire and smaller	11/4	\$4.50 7.20







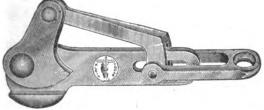
Come Along Grip

Common Eccentric Grip

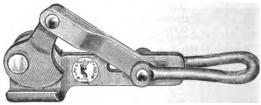
Havens Grip

## Klein's Eccentric Wire Grips KLEIN'S COME ALONG GRIP

List No.	Galvanized	Weight Lbs.	List Price Each
1609-20	For No. 8 wire and smaller	1	\$1.40
1609-30	For No. 6 wire and smaller	2	1.70
1609-40	For No. 0 wire and smaller	21/4	2.30
1607-20	KLEIN'S COMMON ECCENTRIC GRIP  Arranged for Attaching Strap  For No. 8 and finer wire, with clevis for jack straps. Galvanized finish		. \$2.30
	KLEIN'S HAVENS STEEL GRIP		•
1004 10			e4 00
1604-10	For No. 8 wire and finer, galvanized finish	1	\$4.00
16 <b>04-20</b>	For ½ inch wire and finer, galvanized finish	21/2	4.50
1625-20	Improved Havens grip		13.00
This	is a very efficient Grip for all around work.		







Compound Eccentric Grip, Style "A"-Steel

## Klein's Eccentric Wire Grip, Style A

List		Weight	List Price
No.		Lbs.	Each
1605-10 1605-20	Polished brass, for No. 8 and finer wire.  Steel, for ½ inch and finer wire, galvanized finish	13%	\$6.20 7.00

Tools and Construction Appliances

15

#### LINEMEN'S TOOLS



Quick Samson Grip

### Quick Samson Trolley Messenger Wire Grip

The grip consists of a body or retaining piece in which two steel wedge shaped jaws move longitudinally. These jaws are arranged so as to move in either direction simultaneously, thus opening or closing them in unison. The gripping surface of the jaws is concave, and is provided with a series of milled teeth, spread over their entire length. These teeth grip into the spirals of the strand, and being uniformly distributed over the entire length of the jaw, grip the wire at very many points, thus taking a secure hold with the pressure distributed along the entire length of the gripping surface, so that no amount of strain falls sufficiently at one point to crush or injure the wire. The tackle is attached to the two oblong rings in the body piece; these rings being arranged central, insure a straight pull. The proportions of the various parts are calculated to carry any strain that is necessary to tighten the wire and the jaws are self-adjusting. Made in the following sizes:

For I	Messens	er or	Strand
-------	---------	-------	--------

List		Weight, Lbs.	List Price
No.		Each	Each
1618-20	For 16 to 3/8 in. strand, gripping surface 7 in	8	\$21.00
1618-30	For $\frac{1}{4}$ to $\frac{1}{2}$ in. strand, gripping surface 7 in	$9\frac{3}{4}$	25.00
1618 <del>-4</del> 0	For 16 to 5/8 in. strand, gripping surface 9 in	$14\frac{1}{2}$	28.00

#### For Trolley Wire

A modification of the Quick Samson Grip is available for trolley wire. The jaws are not serrated, but only roughened.

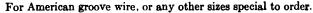
List No.		Weight Lbs. Each	List Price Each
1619-20	For No. 6 to 2-0 B&S wire, gripping surface 7 in	8	\$21.00
1619-30	For No. 2 to 4-0 B&S wire, gripping surface 7 in	91/4	25.00
1619 <del>-4</del> 0	For 15 to 1/8 in. B&S wire, gripping surface 9 in	141/2	28.00



Wire Grip

## Klein's Parallel Screw Wire Grip

| List | Weight Lbs. | List Price | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | Each | E





Howe's Wire Tool Single Purchase



Double Purchase

Howe's Wire Tools

The frames are malleable, castings galvanized finish, roller made of steel. The swivel hook is steel with an opening large enough to go over an insulator pin or other convenient object to anchor to. The forward end has a locking device to hold the load at any distance. It is arranged so it can be used with a vise or with a grip.

List No. 1702-20 1702-30	Single purchase strap 1½ in. wide, 9 ft. long	Weight Lbs. 2	List Price per Set \$8.80 9.90
	· 17 Tools and Cons	truction A	ppliances

## **PULLEY BLOCKS**







Double with



Single with Becket



Single Shell Double Shell Hook and Eye Double Eye



Single Shell One Eye



Double Shell One Eye

\*List Price

## Steel and Wooden Pulley Blocks

#### WOOD PULLEY BLOCKS

#### Wood Pulley Block with Hook

Size Sheave,	Length	No. of	Size †L	ist Price	Size Sheave,	Length	No. of	Size †L	ist Price
Inches	Shell	Sheaves	of Rope	Each	Inches	Shell	Sheaves	of Rope	Each
134 x 36 x 36 134 x 36 x 36 134 x 36 x 36 2 x 36 x 36 2 x 36 x 36 2 x 36 x 36 2 x 36 x 36 2 x 36 x 36 2 x 36 x 36	3 ins. 3 ins. 3 ins. 3 ins. 3 ins. 3 ins. 3 ins. 4 ins.	Single Double Triple Single Double Triple Single	% in. % in. % in. % in. % in. % in. % in. % in.	\$0.88 1.68 2.18 .91 1.80 2.50 1.05	3 x 34 x 36 3 x 34 x 36 3 x 34 x 36 3 2 x 1 x 34 3 2 x 1 x 34 3 2 x 1 x 34 3 2 x 1 x 34	5 ins. 5 ins. 6 ins. 6 ins. 6 ins. 8 ins.	Single Double Triple Single Double Triple Single	% in. % in. % in. % in. % in. % in. % in. % in.	\$1.13 1.91 2.80 1.38 2.50 3.63 2.05
2¼ x ½ x ¾	4 ins.	Double	1/2 in.	2.00	434 x 116 x 36	8 ins.	Double	1 in.	3.55
2¼ x ¼ x ¾	4 ins.	Triple	1/2 in.	2.68	434 x 116 x 36	8 ins.	Triple	1 <b>in.</b>	5.30

NOTE: State if wanted with or without becket.

## Japanned and Hollow Shell Steel Tackle Block

<b>.</b>			~		ce Each				·	†List Pri	
Diameter	Length	No. of	Size of	Japanned	Hollow	Diameter	Length	No. of	Size of	Japanned	
Sheaves	Shell	Sheaves	Rope	†Steel	Shell	Sheaves	Shell	Sheaves	Rope	Steel	Steel
1¾ ins.	3 ins.	Single	% in	\$0.88	\$2.25	31/2 ins.	6 ins.	Single	¾ in.	\$1.38	<b>\$3</b> .08
134 ins.	3 ins.	Double	3/8 in.	1.68	4.40	31/2'ins.	6 ins.	Double	31 in.	2.50	<b>5</b> .70
i 34 ins.	3 ins.	Triple	3% in.	2.18	6.28	3½ ins.	6 ins.	Triple	¾ in.	3.63	7.96
2¼ ins.	4 ins.	Single	1/2 in.	1.05	2.34	4 1/4 ins.	7 ins.	Single	7% in.	1.63	3.56
2¼ ins.	4 ins.	Double	1/2 in.	2.00	4.58	4 ¼ ins.	7 ins.	Double	₹ in.	3.00	6.55
2¼ ins.	. 4 ins.	Triple	1/2 in.	2.68	6.55	4 ¼ ins.	7 ins.	Triple	⅓ in.	4.38	8.80
3 ins.	5 ins.	Single	⅓ in.	1.13	2.52	4 3/4 ins.	8 ins.	Single	1 in.	2.05	4.58
3 ins.	5 ins.	Double	5∕8 in.	1 91	4.88	4 3 ins.	8 ins.	Double	1 in.	3.55	8.26
3 ins.	5 ins.	Triple	₩ in.	2.80	6.82	43/ ins.	8 ins.	Triple	1 in.	5.30	11.62

## Malleable Iron Pulley Blocks

	per Dos.
Malleable iron 21/4 in. shell, single, one eye, for 3/4 in. rope	\$3.92
Malleable iron 21/2 in. shell, single two eyes, for 1/2 in. rope	3.92
Malleable iron 21/4 in. shell, double, one eye, for 1/8 in. rope	5.75
Malleable iron 21/2 in. shell, double, two eyes, for 3/4 in rope	5.75
Malleable iron 3 in. shell, single, one eye, for ½ in. rope	6.85
Malleable iron 3 in. shell, single, two eyes, for ½ in. rope	
Malleable iron 3 in. shell, double one eye, for ½ in. rope	
Malleable iron 3 in. shell, double, two eyes, for 1/2 in. rope	9.00
Malleable iron 21/4 in. shell, single, with hook and eye, for 3/4 in. rope	7.20
Malleable iron 21/4 in. shell, single, with hook and eye, for 1/8 in. rope	7.20
Malleable iron 21/4 in. shell, double, with hook, for 1/4 in. rope	9,00
Malleable iron 21/2 in. shell, double, with hook and eye, for 1/8 in. rope	
Malleable iron 3 in. shell, single, with hook, for 1/2 in. rope	
Malleable iron 3 in. shell, single, with hook and eye, for ½ in. rope	
Malleable iron 3 in. shell, double, with hook, for 1/2 in rope	
Malleable iron 3 in. shell, double, with hook and eye, for 1/2 in. rope	13.70

†Delivery F. O. B. Factory, Lockport, N. Y. \*Delivery F. O. B. Factory, South Portland, Me. For warehouse deliveries write nearest house. Digitized by GOOGLE

## KLEIN'S LINEMEN'S TOOLS





Self-locking Block Set No. 1802-30



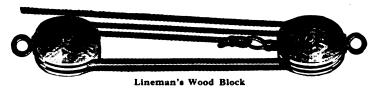
Self-locking Block Set No. 1803-30

Lineman's Sinck Tackie No. 1801-30

### Self-Locking Lineman's Slack Tackle

Light steel shell blocks fitted with snubbing hook to lock in any position, also in handling a vertical load. To lock the load, simply pull the luff rope under the hook. To release, simply pull the rope. The forward block is arranged with a snap hook with spring guard.

Self-locking lineman's slack tackle, galvanized, furnished with 25 ft. of rope.	Weight Lbs. $2\frac{1}{2}$	List Price per Set \$6.30
Self-locking Blocks		`
Self-locking troubleman's blocks, galvanized, with snap at end for attaching grip, furnished with 25 ft. % in. rope.	21/2	\$6.30
Self-locking lineman's eye blocks, galvanized, with eye at each end for	2	5.80
	Self-locking Blocks Self-locking troubleman's blocks, galvanized, with snap at end for attaching grip, furnished with 25 ft. % in. rope.	Self-locking lineman's slack tackle, galvanized, furnished with 25 ft. of rope.  Self-locking Blocks  Self-locking troubleman's blocks, galvanized, with snap at end for attaching grip, furnished with 25 ft. 3% in. rope



## Lineman's Wood Eye Blocks With Eye at Ends for Fastening Grips

List No.		per Pair	List Price per Pair
4900-3	3 in. block for 7/16 in. rope	2 lbs.	\$5.20
4900-4	4 in. block for ½ in. rope	3 lbs.	5.80
	5 in. block for $\frac{5}{8}$ in. rope	7 lbs.	8.60
We	can furnish rope, but none is included in the prices listed.		



Pulley Block With Eccentric Grip

## Klein's Pulley Blocks with Eccentric Grips

List No.	•	_		List Price per Pair
4902-21/4	Klein's pulley block with eccentric grip		2 lbs.	\$8.90
Rope	extra.	Digitized by	JUSIC	-

#### "YALE" HOIST BLOCKS









Yale Triplex Blocks

## "Yale" Triplex Blocks From Hook to Hook a Line of Steel Capacity ¼ to 20 Tons

"Yale" Triplex Blocks are rated on a capacity basis of a long ton 2240 lbs. and each block is tested at the factory with a 50 per cent. overload of 3360 lbs. for each rated ton. Every detail in Yale Hoists is the result pendent automatic load-sustaining device, operated entirely separate from its lifting mechanism, admits of 80 per cent. of the power exerted by a man pulling on the hand chain being transformed into actual lifting energy.

"Yale" steel safety hooks, steel suspension members and Yale steel chain are some of the exclusive features of these blocks introduced to safeguard operators and loads.

The blocks are so planned that all capacities are made up of the four basic sizes, namely: ½, 1, 1½ and 2 ton. This simplifies the renewal of parts; for example, the 2 ton parts fit all sizes 4 tons and larger.

#### List Prices and Data

List No.	Capacity in Tons	Net Weight	List Price Complete Block with Std. Hoist	Std. Hoist in Feet	List Price Extra Hoist per Foot
761856	1/4	60 lbs.	\$84,00	8	\$2.16
761857	1/3	60 lbs.	84.00	8	2.16
761858	1	95 lbs.	108.00	8	2.28
761859	134	131 lbs.	144.00	8	2.40
761860	2	200 lbs.	168.00	9	2.56
761861	3	210 lbs.	216.00	10	8.60
761862	4	300 lbs.	264.00	10	3.84
761863	5	410 lbs.	336.00	12	5.16
7618 <b>64</b>	6	410 lbs.	396.00	12	5.16
761875	8	500 lbs.	480.00	12	6.48
761876	10	610 lbs.	<b>5</b> 76. <b>00</b>	12	7.80
761877	12	850 lbs.	720.00	12	10.32
761878	16	1050 lbs.	864.00	12	12.96
761879	20	1350 lbs.	1020.00	12	<b>15.6</b> 0

A high speed block with special gearing is made in two sizes: 1/4 ton, list price \$80.50, 1/4 ton, list price \$103.50.

Delivery F. O. B. Factory, Stamford, Conn. For warehouse deliveries write nearest house.

7 1 A TO 1

#### "YALE" HOIST BLOCKS

### "Yale" Duplex Blocks

This is a popular type of double chain worm-wheel or screw block. The load chain sheaves are carried on a steel shaft, and are fitted with safety guides. For portable use they are light, powerful chain blocks and take up the least head room.

It will also be found a satisfactory block when the work is to be handled in a horizontal direction or where speed may be sacrificed to ease of handling. It is essentially a rigger's block.

The load is carried on two strands of "Yale" steel chain, each of sufficient strength to carry the entire load. The gearing is entirely enclosed and operates in an oil bath. Guards and guides prevent the load chain from leaving the sheaves and dropping the load. Standard Yale safety hooks are used on this block and the load holding mechanism may be adjusted for quick or safety lowering.

Yale Duplex Blocks are tested to a 50 per cent. overload before shipment.

List No.	Capacity in Tons	Net Weight	List Price Complete	Hoist in Feet	List Price Extra Hoist per Foot
761865	1/2	43 lbs.	\$60.00	8	<b>\$</b> 3.00
761866	1	57 lbs.	72.00	8	3.12
761867	11/2	76 lbs.	96.00	8	3.24
761868	$\hat{2}^{T}$	104 lbs.	120.00	9	3.36
761869	3	180 lbs.	180.00	10	3.60
761870	4	215 lbe.	288.00	10	4.56
761871	5 .	330 lbs.	362.00	12	4.80
761872	6	320 lbe.	432.00	12	6.72
761873	8	380 lbs.	504.00	12	7.20
761874	10	555 lbs.	660.00	12	7.80

#### "Yale" Differential Blocks

The "Yale" Differential Block is an occasional service block where comparatively light loads are to be handled at rare intervals. The hand chain pull is much harder than the 'Yale" Triplex, and the block should not be used where the loads are heavy or the service severe as the wear on the chain and sheaves is greater than in other type of blocks.

The block is light and easily handled. Has the fewest parts and is lowest in first cost.

On account of its reliability and simplicity it is specially adapted for ordinary hoisting purposes where the greater power and durability of the "Yale" Triplex and Duplex are not required.

The sheaves on the "Yale" Differential Blocks are of the proper size and the chain is gauged by a process which hardens it and insures its greater accuracy, consequently the block runs easily under load, and the great strength of the steel chains prevents stretching, a common fault in ordinary blocks.

All "Yale" safety features apply on this block and each one is tested to 50 per cent. overload in long tons before leaving the factory.

The "Yale" Differential is the cheapest good block.

Yale Differential Hoist

Duplex Block

List - No.	Capacity in Tons	Net Weight	List Price Complete	Regular Hoist in Feet	Extra Hoist per Foot
761881	1/4	22 lbs.	\$27.00	6	\$4.20
761882	1/2	30 lbs.	31.50	7	4.20
761883	1	51 lbs.	42.00	8	4.50
<b>76</b> 1884 .	11/2	81 lbs.	54.00	81/4	4.80
761885	2	122 lbs.	<b>67.50</b>	Coogle	5.10
761886	3	180 lbs.	<b>90.00</b> Digiti	ized by 😘 🔾 🗓	6.00
		•••	_		

20-2

**Fools and Construction Appliances** 

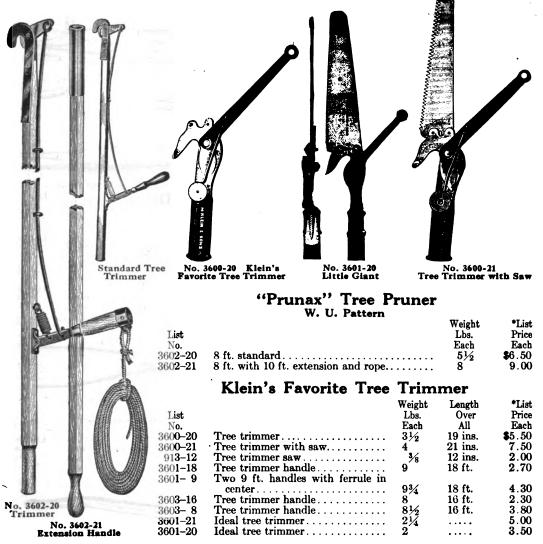
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List No. 296	4.1	Weight Lbs.	List Price per Dos.			Weight Lbs.	List Price per Doz.
290	Adze eye	5 to 6	<b>\$</b> 9.50	450	Panama R. R. pick	. 7	<b>\$29</b> . 65
296	Adze eye	6 to 7	10.00	450	Panama R. R. pick	ė	29.65
396	Adze eye	7 to 8	10.70		ove are furnished with handles.	0	25.00
308	Adze eye			1	ove are furnished with handles.	_	
308	Ada	6 to 7	12.00	424	Mattock, Long Cutter	5	14.40
000	Adse eye	7 to 8	12.70 l	1 424	Mattock, Long Cutter	6	14 . 40 15 . 28
List No.	_		Bush		o <b>k</b>	Wgt. Each with Handles	Price per Dos.
10	Bush hook and hickory handle.					21 lba	\$21.50
				• • • • •			<b>411.50</b>

\*Delivery F. O. B. Factory, Chicago, Ill. †Delivery F. O. B. Factory, South Bend, Ind. †Delivery F. O. B. Factory, Pittsburgh, Pa. For warehouse deliveries write nearest house.

### KLEIN'S TREE TRIMMERS AND LINEMEN'S TOOLS



#### Standard Tree Trimmer

		Appro	x. Wt.	List	1		Appro	x. Wt.	List
List		Ea	ch	Price	List		Ea	ıch	Price
No.	Length			Each		Length	Lbs.		Each
760275	4 ft. Standard	. <b>2</b>	8	\$1.50	760278	10 ft. Standard	. 4	4	\$1.90
						12 ft. Standard			2.12
760277	8 ft. Standard	. 4	0	1.90					



Lineman's Block with Strap

Lineman's Block with Strap

This block has a light steel galvanized shell, wood rollers bushed with metal. The forward block has a locking device for holding the load at variable distances. The outer end of each block has an eye for attaching grip.

List Weight \*List Price per Set No. 4904-12 

## **MISCELLANEOUS TOOLS**









	No. 1550-2—Double Blade	No	o. <b>220</b> 1-3 <del>/4</del> —Bl	unt Point	
List No. 1550-1	Electrician's Knife ar Single blade electrician's knife			Weight	List Price Each \$2.00
1550-2				28 os.	2.50
List No. 2200-414 2201-314	Wire tweezers, needle point		S Finish Nickel Nickel	Length 4½ ins. 3½ ins.	List Price Each \$0.70 1.00
	Electrician's S	cissors			
List No. 2100-5	Electrician's scissors	Finish Nickel plated	Weight Each 23% oz.	Sise 5 ins.	List Price Each \$2.50
	A second				



Wire Peeler

Wire Stretcher

List No. 2301-10	Perry Wire Peeler Weight Lach	List Price Each \$1.20
	Wire Stretcher	••••
761657	Wire stretcher, for No. 8 wire and smaller	\$3.76









Nos. 206 to 212 Carpenter's Pincers Without Cutter No. 14 Black Finish Twin Wrench

CARPENIER 5 FINCERS								
List Nos. 206 to 212 have polished jaws and natural finish b	andles.	Claw and screw	driver h	andles.	912			
Length, ins.	6	7	8	10	12			
Weight, lbs., per dos	5 \$5.86	71/3 <b>3</b> 7, 34	914 \$7,94	14 \$10.26	\$11.72			
Packed ½ dosen in a cardboard box.	₩. 80	<b>₽</b> 7.0%		<b>410.20</b>	<b>V</b> 2			

## KLEIN'S LINEMEN'S PLIERS



Klein's "World Special" Side Cutting Pliers



With Sleeve Twister

## Klein's "World Special" Side Cutting Pliers

List No.	Size	Weight per Doz.	List Price List Each No.	Size	Weight per Doz.	List Price Each
200-5	5 in.	3 lbs.	\$2.90   200-8	8 in.	12 lbs.	\$4.60
200-6	6 in.	5 lbs.	3.50   200-9	9 in.	13 lbs.	6.00
200-7	7 in.	7½ lbs.	4.00   200-10	10 in.	18 lbs.	7.00

#### With Sleeve Twister

List		Weight	List Price
No.		per Doz.	Each
213	6 in. B. & S. sleeve twister for No. 17 wire or No. 16 iron wire	5 lbs.	\$4.00
213-7	7 in. B. & S. sleeve twister for No. 12 wire or 14 B. W. G. iron wire	7½ lbs.	4.60
213-8	8 in. B. & S. sleeve twister for No. 10 wire or 12 B. W. G. iron wire	12 lbs.	5.50
213-9	9 in. B. & S. sleeve twister for No. 10 wire or 12 B. W. G. iron wire	13 lbs.	6.50



Klein's "Diamond Special" Side Cutting Pliers



With Sleeve Twister

## Klein's "Diamond Special" Side Cutting Pliers

List No.	Size	Weight per Doz.	List Price   Each	List No.	Size	Weight per Doz.	List Price Each
201-5	5 in.	3 lbs.	\$2.90	201-9	8 in.	12 lbs.	\$4.60
201-6	6 in.	5 lbs.	3.50		9 in.	12½ lbs.	6.00
201 <b>-7</b>	7 in.	7½ lbs.	4.00		10 in.	18 lbs.	7.00

#### With Sleeve Twister

List		Weight	List Price
No.		per Doz.	Each
212-6	6 in. B. & S. sleeve twister for No. 17 wire or No. 16 iron wire	5 lbs.	<b>\$4</b> .00
212-7	7 in. B. & S. sleeve twister for No. 12 wire or 14 B. W. G. iron wire	7⅓ lbs.	4.60
212-8	8 in. B. & S. sleeve twister for Nos. 9 or 10 wire or 12 B. W. G. iron wire		5.50
212-9	9 in. B. & S. sleeve twister for Nos. 9 or 10 wire or 12 B. W. G. iron wire	13 lbs.	6.50



Klein's Duck Bill Pliers Without Side Cutters



Klein's Extra Long Duck Bill Pliers

List	Size	Weight	List Price    List	Size	Weight	List Price
No.	Inches	per Doz.	Each No.	Inches	per Doz.	Each
304-5	5 Without cutter	3 lbs.	<b>\$</b> 2.30   205-5	5 With Side Cutter	2¾ lbs.	\$2.60
304-6	6 Without cutter	3¼ lbs.	2.60 205-6	6 With Side Cutter		2.90
<b>304-7</b>	7 Without cutter	3½ lbs.	2.90    <b>205-7</b>	7 With Side Cutter	3 1/2 lbs.	3.20
			25	Tools and Cor	astruction A	ppliances

#### WIREMEN'S PLIERS



Klein's Extra Long Nose Pliers Without Side Cutters



Klein's Extra Long Nose Pliers (Side Cutting)

## Klein's Extra Long Oval Nose Pliers

List No.	Size Inches		Weight per Doz.	List Price Each		Size Inches		Weight per Doz.	List Price Each
301-5 301-6 301-7	5 6 7	Without Cutter Without Cutter Without Cutter	$2\frac{3}{4}$ lbs. 3 lbs. $3\frac{1}{4}$ lbs.		203-5 203-6 203-7	5 6 7	With Side Cutter With Side Cutter With Side Cutter	2¾ lbs. 3 lbs. 3¼ lbs.	\$2.60 2.90 3.20



Long Needle Nose Pliers



Rubber Sleeves for Insulating Pliers

# Klein's Extra Long Needle Nose | Rubber Sleeves For Insulating

List No.	Size Inches		Weight per Doz.	List Price Each
303-5	5	Without Cutter	2½ lbs.	\$2.30 2.60 2.90
303-6	6	Without Cutter	3 lbs.	2.60
303-7	7	Without Cutter	3¼ lbs.	2.90

1	1	Made of Fure Gum Sor	t Rubbe	r
ı	List		Weight	List Price
۱	No.		per Ďoz.	Each
١	2400-6	For 6-in, pliers, per pr.	23/4 lbs.	\$1.00
ı	2400-7	For 7-in, pliers, per pr.	3¼ lbs.	1.10
I	2400-8	For 8-in. pliers, per pr.	3¾ lbs.	1.20



Klein's Extra Long Curved Nose Pliers



Klein's Oblique Diagonal Cutting Pilers

## Klein's Extra Long Curved Nose Pliers

List No.	_	Weight per Doz.	List Price Each
302-6	6 inch extra long curved nose pliers	2¾ lbs.	<b>\$3.00</b>
	Klein's Oblique Diagonal Cutting Pli	ers	
202-5	5 inch diagonal cutting pliers	4 lbs.	\$2.90 3.10



Extra Long Flat Nose Pliers Without Side Cutters

### Klein's Extra Long Flat Nose Pliers Without Side Cutters

	11619	Without Side Catters				
List	Size		Weight	List Price		
No.	Inches		per Doz.			
305-5	5	Without Cutter	3 lbs.	\$2.30		
305-6	6	Without Cutter	3⅓ lbs.	2.60		
305-7	7	Without Cutter	$3\frac{3}{4}$ lbs.	2.90		



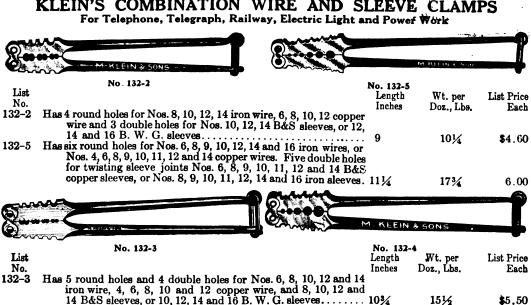
Extra Long Flat Nose Pliers With Side Cutters

## Klein's Extra Long Flat Nose Pliers—Side Cutters

List No.	Siz	•		Weight per Doz.	List Price Each
206-5	5	With	Side Cutter	31/4 lbs.	\$2.60
206-6 206-7	6	With	Side Cutter Side Cutter	3 1/2 lbs.	2.90 3.20

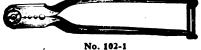
Tools and Construction Appliances

## KLEIN'S COMBINATION WIRE AND SLEEVE CLAMPS



103/4 151/2 \$5.50 14 iron wire, and 4 to 12 copper wire.... 151/2 5.50

Klein's Splicing Clamp
The splicing clamp is one of the most important tools in the lineman's kit, and as electrically and mechanically good joints are of the most importance in a line, it is evident that the tools selected to do this work should have careful consideration. The following illustrations show our different styles and the sizes of wire for which they are fitted. The handles have a spring temper and will not bend out of shape after being closed on the wire.



Baby Pattern for Telephone Work

List		Length	Wt. per	List Price
No.		Inches	Doz., Lbs.	Each
102-1	For Nos. 10, 12, 14, and 16 copper wire; 12, 14, 16, 18 iron wire.	7	41/2	<b>\$</b> 3. <b>50</b>
102-3	For Nos. 6, 8, 10, 12 and 14 iron wire, 4, 6, 8, 10 and 12 copper wire	101/2	143/4	4.60
			. •	_



For Electric Light, Telegraph and Railroad Work

List	Length	Wt. per	List Price
No.	Inches	Doz., Lbs.	Each
102-4 For Nos. 0, 2 and 4 copper wire	10¾	143/4	<b>\$4</b> .60
Joint Twister			List Price
For Double Tube Sleeve, Nos. 8, 10,	12		Each
Joint twister: 10½ inches long			\$4.00



Nos. 105-6 and 105-7

For Telephone, Telegraph, Railway, Light and Power Work

List No. 105-6 105-7	For sleeves Nos. 8, 10, 12 and 14 For sleeves Nos. 6, 8, 10 and 12 B	B&S gauge or 10, 12, 14, 16 B. W. B&S gauge or 8, 10, 12, 14 B. W.	Length Inches G. 10½ G210½	Wt. per Doz., Lbs.	List Price Each \$4.60 4.60
	69	37	Tools and	onstruction A	Appliances

#### WIREMEN'S TOOLS



Laurent Cherry Block



No. 300 Dicke Messenger Clamp

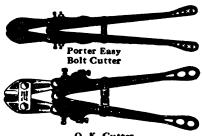
## Laurent Cherry Pulley Block

This pulley block is especially recommended where heavy pulling is necessary, drawing cables, tightening guy wires, stretching messenger cable, etc. One man can tighten a heavy back guy with a No. 4, while two men can stretch a heavy messenger cable with a No. 6. It is an ideal tool for the lineman. It never slips, pulls powerfully and is convenient in any position. The No. 6 size pulls or lifts two tons; the No. 4 size pulls or lifts three-quarters of a ton.

List No.		Wgt. Lbs.	*List Price Each
2	Laurent Cherry Pulley Block		\$16.00
4	Laurent Cherry Pulley Block	• •	32.00 48.00
0	Laurent Cherry Fulley Block	• •	960.00

### Dicke Messenger Clamp

Dicke Messenger Clamp... t\$27.00 300 For any wire mesauring from 1 to 34 in.









Porcelain Tube and Carbon Cutter

#### **Bolt and Wire Cutters**

List No.	Style	Weight Lbs.	Length Inches	To Cut Bolts Inches	<sup>≜</sup> List Price Each
0	Porter New Easy Bolt Cutter	3	18	18	<b>\$4.40</b>
· 1	Porter New Easy Bolt Cutter	53/4	241/2	<b>5</b> /8	5.50
2	Porter New Easy Bolt Cutter	9	30	1/2	7.70
3	Porter New Easy Bolt Cutter	13	36	<b>5</b> √8	9.90
0	Boston Wire Cutter	31/2	181/2	Opening 🛧	7.70
1	Boston Wire Cutter with Hook	51/4	241/2	Opening 1/4	16.50
2	Boston Wire Cutter	51/4 83/4	301/8	Opening 11/8	12.10
3	Boston Wire Cutter	1314	361/8	Opening 11/4	15. <del>4</del> 0

#### O. K. Cutters

				List Price
List No.		Length	Weight	Each
10	O.K. Cutter (capacity with clipper cut jaws, 18 in.)	10	11/4 lbs.	<b>\$</b> 2.75
14	O.K. Cutter (capacity with clipper cut jaws, ¼ in.)	14	2 lbs., 5 os.	3.30

## Hagstrom Porcelain Tube and Carbon Cutter

List No.	IList Pr	ice Each
760514	Adjustable cutter for $\frac{1}{16}$ , $\frac{3}{8}$ , $\frac{1}{2}$ and $\frac{5}{8}$ in. porcelain tubes	\$5.00
760515	Non-adjustable cutter	3.00

\*Delivery F. O. B. Factory, Trenton, N. J. \*Delivery F. O. B. Factory, Boston, Mass. †Delivery F. O. B. Factory, Downers Grove, Ill. †Delivery F. O. B. Factory, New York, N. Y. For warehouse deliveries write nearest house. Digitized by GOOGLE

#### KLEIN'S LINEMEN'S TOOLS



Steel Lag Screw Wrench

Combination Lag Screw Wrench

Klein's Steel Lag Screw Wrench
This wrench is forged from select bar steel. The jaw is made tapering, allowing it to take any ordinary size machine bolts, nuts, or lag screws, from 3% inch. The hook is a means of attaching the wrench to the tool belt, and it serves to keep the heads of bolts within the jaws of the wrench when in use

to one	a being and it between to meet the meads of botto within the jame t	· · · · · · · · · · · · · · · · · · ·	*********	
List			Weight	*List Price
No.	•	Length	per Doz.	Each
<b>3</b> 110-20	Steel Lag Screw Wrench, full polished	11½ ins.	20 lbs.	<b>\$4</b> .00
3112-20	Combination Steel Lag Screw Wrench	$13\frac{1}{2}$ ins.	20 lbs.	3.00

Klein's Combination Lag Screw Wrench

This wrench is forged from select bar steel. The slot in this wrench is formed in a cross shape, and will fit machine bolts, nuts or lag screws, from  $\frac{3}{8}$  inch to  $\frac{5}{8}$  inch. The small end of the wrench is arranged for  $\frac{1}{16}$  inch machine bolts or lag screws, the round hole allowing the end of a bolt to come through as the nut is run on. 3109-20 20 lbs. \$4.00  $13\frac{1}{2}$  ins.



#### Cut Shows Actual Size

#### Terminal Wrench

This wrench is especially adapted for use on terminal nuts, receivers, transmitters, binding posts, etc. There are three different side openings, with dimensions as follows:  $\frac{3}{8}$  inch,  $\frac{5}{8}$  inch, and  $\frac{1}{16}$  inch, which will engage either square or hexagonal nuts. One end is bent at an angle of 45 degrees, to allow its use in confined places.

Wgt. \*List Price List No. Length per Doz. Each 3/4 lb. 3111-20 Terminal Wrench..... 2 13 in. \$0.50



Weight \*List Price Std. List Extension Chuck Pkg. pe Doz. No. S-21 Length Each 134 lbs. 144 5 ins. \$0.60 144 10 ins. 25/8 lbs. .70 8-22 





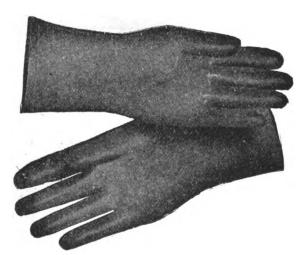


## Hollow Handle Tool Sets

List		1.ength	Length	<b>ĮList</b>
No.		of Handle	of Tool	Price
4	Cocobolo wood, jaws and shell nickeled 10 tools	$6\frac{1}{4}$ in.	2½ in.	<b>\$2</b> .00
600	Combination handle, complete with 20 tools	5 in.	$2\frac{1}{4}$ in.	1.50
	*Delivery F. O. B. Factory, Chicago, Ill., Delivery F. O. B. Fac	tory, Miller	Falls, Mass. I	or ware-
house	e deliveries write nearest house.	Digitized by	CIOUXIC.	1

### RUBBER GLOVES

#### Pure Rubber Gloves



Seamless Glove-Unlined

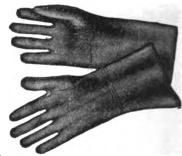
List	Size	Length
No.	No.	Inches
760542	10	12
760548	11	12
760545	10	15
760551	11	15
760543	10	12
760550	11	12
760546	10	15
762025	11	15



The seamless type gloves are made of red rubber. Only the best selected pure fine Para rubber is used in their manufacture. Being seamless, they have no imperfection on account of laps or joints. They are easily cleaned or dried by turning, as they have no fabric or lining to interfere. They are flexible and serviceable, while the safety is measured by the tests to which each pair is subjected before leaving the factory.

The sizes are standard rubber glove sizes and compare with Nos. 14 and 15 of the coated seam glove. The standard weights are tested for about 4,000 volts, heavy weights about 10,000 volts. The heavy palm have the standard weight gauntlet, but palm of this glove is tested for about 10,000 volts. Length, 11 to 15 inches.

QL. I.	List Price
Style	Each Pair
Standard	<b>\$</b> 3.70
Standard	4.00
Standard	4.60
Standard	4.98
Ex. Heavy Finger & Palm	4.20
Ex. Heavy Finger & Palm	4.30
Ex. Heavy Finger & Palm	4.90
Ex. Heavy Finger & Palm	5.40



With Gauntlet

## Rubber Gloves, Cloth Lined

To determine size required, measure hand around knuckles, and then add 6 inches to measurement; i.e., if hand should measure 8 inches, order size No. 14 for close fit, or No. 15 for loose fit.]

#### MEN'S LIGHT ELECTRICIAN'S GLOVES

Size Inches 10, 11, 12 13, 14, 15	Light electrician's	Short \$2.50 3.00	4½ Inch Gauntlet \$3.00 3.50	9 Inch Gauntlet \$3.50 4.00
	LINEMAN'S HEAVY REINFORCE	D		
12, 13, 14, 15 16 17 18	Lineman's heavy reinforced.  Lineman's heavy reinforced.  Lineman's heavy reinforced.  Lineman's heavy reinforced.	5.40 6.00	\$6.00 6.50 7.00 7.50	\$7.00 7.50 8.00 8.50
			$\cup$	

## LINEMEN'S TOOLS











Klein's Pole Climbers

List			Weight	List Price
No.		Length	per Pair	per Pair
1900	Eastern—without straps, riveted strap loops	15 to 18 in.	3¾ lbs.	<b>\$</b> 6.30
1903	Special light weight Eastern riveted loops—without straps	15 to 16½ in.	$2\frac{3}{4}$ lbs.	6.30
1901	Eastern—without straps, punched strap loops	15 to 18 in.	$3\frac{5}{8}$ lbs.	5.70
1902	Western—without straps		$2\frac{5}{8}$ lbs.	4.60
••	TTY	half inch maniati		

Note: When ordering climbers, always specify length wanted by half inch variation.

The steel in Linemen's Eastern Pattern Climbers is made to special order of a springy, durable quality, forged to the right thicknesses for safety and lightness. The gaffs are of tool steel set into the shank and never loosen. When worn down, however, they can be removed and new gaffs set in place.

The lines of form make them well fitting and comfortable.

Quality and workmanship is the best in either. The only difference is in the loop through which the straps pass. The No. 381 and No. 381L have the loops riveted into the shank, while in the No. 382 they are punched out of the metal of the shank. No. 381L is the pattern of No. 381, but made lighter than the standard weight.

If straps are wanted with climbers, mention it in the order. We never send straps unless it is mentioned.







Plain Leather Pads

## Climber Straps

List	•	Weight	List Price
No.		per Doz. Sets	per Pair
762064	Straps for Eastern Climbers, with plain leather pads	15 lbs.	\$5.70
762065	Straps for Eastern Climbers, with sheep-lined pads	16 lbs.	6.40
762066	Straps for Eastern Climbers, with felt-lined pads	16 lbs.	6.40
762067	Straps for Western Climbers, with plain leather pads	15 lbs.	5.70
762068	Straps for Western Climbers, with sheep-lined pads	16 lbs.	6.40
762069	Straps for Western Climbers, with felt-lined pads	16 lbs.	6.40
	Climber straps set consists of two upper straps with 4 x 4 leather pads	and two lower	straps as

sts of two upper straps with  $4 \times 4$  leather pads and two lower straps as shown in cut.

Western Climber straps set consists of two upper straps with oval plain leather pads and two lower straps as shown in cut.

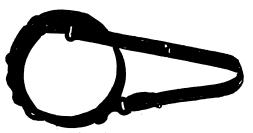
#### Strap Pads

List		Weight	List Price
No.		per Doz. Sets	
762070	Strap Pads, sheep lined, 4 x 4 inches	3 lbs.	\$1.76
762071	Strap Pads, felt lined, 4 x 4 inches	3 lbs.	1.76
762072	Strap Pads, plain leather, 4 x 4 inches	ે 3dbs.૦	1.10
	- I Digitized by		

## LINEMEN'S STRAPS AND BELTS



Plain Tool Belt



Belt and Safety Strap



Double Tool Belt, With Rings



Single Tool Belt, With Rings

List No.	Belt and Safety Strap	Lbs.	List Price Each
762073 The s	$2\frac{1}{4}$ in. belt, including safety strap	3½ end.	\$14.40

## Safety Tool Belt With Rings

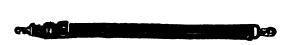
762074	21/4 in. belt, with rings for attaching safety strap	1 5/6 lbs.	\$7.60
702075	3½ in. belt, with rings for attaching safety stran	1.5/6 lbs.	9.40
762076	21/4 in. double belt, with rings for attaching safety strap.	2 lbs.	8.20



Leather Pouch



Safety Strap



Jack or Vise Strap



Combined Safety and Jack Strap

	Combined Safety and Jack Strap		
List No.	•	Lbs.	List Price Each
762078	1¾ in. strap, fixed snap on one end, roller snap at other	21/4	\$7.80
	Jack or Vise Strap		
762079	Regular Jack Strap, for vise, 11/4 in. x 51/2 ft	3⁄4 lbs.	\$4.00
	Safety Strap		
762080 762081	134 in. x 6 ft. Safety Strap, with japanned snaps. 134 in. x 614 ft. Safety Strap, with roller snaps.	2½ lbs.	\$6.80 7.20
762082 762083	1 1 in. x 6 1/2 ft. Safety Strap, with swivel roller snaps. 2 in. x 6 ft. Safety Strap, with roller snaps.	21/2 lba	9.60
		2¾ lbs.	0.00

## Leather Pouch

## Western Electric

## TOOL BAGS



No. 5108. Leather Tool Bag

## Inspector's Leather Tool Bag, Harness Leather

This bag is a combination of all the good features of the various common leather bags. It is made of harness leather and will stand rough and hard usage and still always look well. It has a shoulder strap combined with a pad and hand strap; saw and bit. The bottom is three ply and is studded with steel studs. Retaining straps pass clear around the bag so that it may be loaded to the limit of its capacity and be securely held intact. All seams are sewed with hot waxed linen thread, lock stitched. The leather used does not absorb moisture.

List No.		Wgt. Lbs. Each	List Price Each
762085	14 x 8 in. harness leather	3	\$14.00
762086	16 x 8 in. harness leather		15.20
762087	18 x 8 in. harness leather		16.60
762088	20 x 8 in. harness leather	$5\frac{1}{8}$	18.0 <b>0</b>
762089	22 x 8 in. harness leather	6	19.40
762090	24 x 8 in. harness leather	71/4	20.80



Canvas Tool Bag



No. 5101-15

## Lineman's Canvas Tool Bag, Leather Bottom

List	Size		List Price		· Size		List Price
No.	Inches	Each	Each	No.	Inches	Each	Each
762091	24 in	41/2	\$8.60	762095	16 in	31/2	\$8.00
762092	22 in	4	9.20	762096	14 in	Š	7.40
762093	<b>20</b> in	31/8	10.00	762097	12 in	25/8	6.60
762004	18 in	33/	11.00 l			_	

## Inspector's Black Leather Tool Bag

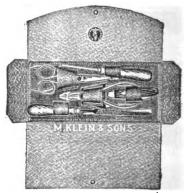
This bag is made with shoulder straps entirely of leather, tongue and buckle fastenings, convenient for inspector, wireman or lineman.

List		Wgt. Lbs.	List Price
No.	i.	Each	Each
762098	· 15 ins. long, 12 ins. high	3 ⊤	\$15.00
762099	20 ins. long, 12 ins. high	) ( <b>334</b> ( -	18.50
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## KLEIN'S POCKET TOOL KITS



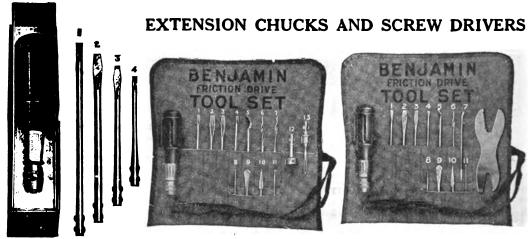




No. 1301-2

These tool kits are recommended especially for every electrician, mecnanic, repairman, inspector, lineman, signalman and supervisor.

List No.		Wt. Lbs.	List Price Each
1304-2	Genuine leather case, 8 ins. long, 3½ ins. in width and 2 ins. high when closed. Furnished in either russet or black leather. The kit contains seven tools. They are 7 in. special side cutting pliers, 5 in. nickel-plated scissors; double-bladed knife screw driver and wire scraper combined; 3 in. half-round mill file and handle; 2½ in. screw driver, 3½ in. nickel-plated tweezer and 2 ft.		
1304-1	4 fold boxwood rule	$\frac{1\frac{3}{4}}{1\frac{1}{6}}$	\$16.50 5.60
1301-2	Genuine leather case. It is 4 x 9 ins. It contains: One single blade "Xela" electrician's knife, one 5 in. special side cutting pliers, one 5 in. oblique diagonal pliers, one 6 in. long nose side cutting pliers, one 3½ in. blade nickel-plated screw driver and one pair 5½ in. electrician's scissors, 4½ in. nickel	72	0.00
1301-1	plated tweezers, one 3½ in. file and handle	$\frac{1\frac{3}{4}}{\frac{1}{2}}$	\$21.00 5.60



Screw-driver Set No. 1

Tool Set No. 4

Tool Set No. 7

SCREW-DRIVER SET. Set No. 1 consists of one friction drive handle with four-jaw screw chuck and four screw-driver blades put up in a box.

List	No. of	Std.	Wt. Lbs.	List Price
No.	Blades	Pkg.	Std. Pkg.	Each
8-1	4	12	63/4	<b>\$</b> 1.80

AUTO TOOL SETS. Tool Set No. 4 consists of one friction drive handle with four-jaw screw chuck, five screw-driver blades and six additional tools.

Tool Set No. 7 consists of four screw-driver blades, one three-sided angle screw-driver blade No. 5, one gimlet No. 6, one spark plug scraper No. 7, one sharp-pointed awl No. 8, one counter sink No. 9, one taper reamer No. 10, one brad awl No. 11, one friction drive handle or chuck, one double-ended alligator wrench.

8-4 13 12 10 8-7 12 12 10 igitized by GOGIC 4.50

### Western Electric

#### ALL-STEEL TOOL KITS

These kits are made of prepared steel, but are no heavier than other bags or tool kits, their average weight being between 5 and 11 pounds, depending on size.

They are built to stand the wear and tear of hardest usage, being reinforced throughout, and fitted with brass side catches, strong two-tumbler Yale locks, steel leather-covered handles, so riveted that

they cannot pull out, and are protected by solid corner irons.

Finished in a durable baked enamel of brown or black, they present an appearance neat and attractive, and look like leather traveling bags or grips. Disappearing and waterproof hinges give smooth carrying surface with no rivets showing and no points to catch. Material, special construction, and overlapping features make these kits waterproof, fire, oil and weatherproof. These kits are also thief-proof because they can be locked, chained if desired, and cannot be cut open. Heavy material can be carried without buckling or changing shape of bag. There is no strain on hinges or locks as entire weight is on body of bag. Double seamed, electric welded and reinforced throughout. The trays are very handy for carrying drills, bits, screws and other small articles.



#### Standard Kits

For Electrical Workers, Mechanics, Railroad Men, Construction Men, Installation Men and Contractors

List			Dimensions			•List
No.	Style	Length	Width	Height	Weight	Price
114	$\mathbf{X}\mathbf{T}$	14 ins.	7 ins.	9 ins.	$4\frac{1}{2}$ lbs.	\$8.00
116	DDT	16 ins.	9 ins.	11 ins.	$5\frac{1}{2}$ lbs.	9.00
118	$\mathbf{DT}$	18 ins.	10 ins.	13 ins.	$6\frac{5}{8}$ lbs.	8.60
120	ET	20 ins.	11 ins.	13 ins.	$7\frac{1}{4}$ lbs.	8.80
122	FT	22 ins.	11 ins.	13 ins.	10½ lbs.	9.20

Without tray, deduct 48 cents from each size.

#### Standard Electrician's Cases

These cases are designed for and meet all the requirements of an electrician's tool kit. They have the necessary length, together with compactness and proper spacing for carrying the average equipment. They have a divided spacing at one end for blowtorch and ledge rests at top of grip for tray to carry drills, bits, small parts, etc., if desired. They have ample space at bottom for heavy tools, material, etc. In addition to leather handle, they are fitted with loops at each end for straps to pass under the case and over the shoulder for carrying heavy loads in this manner if desired. Furnished with or without tray.

List	Length	——Dimensions Width	Height	Weight	*List Price
No.	Dengen			A eight	Frice
		Style EN, v	vith Tray		
319	19	8	9	71/4	\$8.40
		Style EO, v	vith Trav		
321	21	8	9	81/2	8.60
		Style EH, v	vith Trav		
324	241/2	6	6	81⁄4	8.80

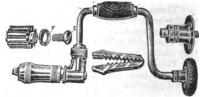
Special cases in steel built on order.

\*Delivery F. O. B. Factory, Van Wert, Ohio. For warehouse deliveries write nearest house.

## **MECHANICS' TOOLS**







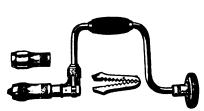
Nos. 30 to 34 and 30A to 34A

D.	1	4	D.		
Ka	ITC.	het	D	rae	ces

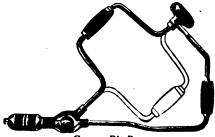
Polished and nickeled.				
List Nos.	770	771	772	773
Size sweep	<b>14</b> ins.	12 ins.	10 ins.	8 ins.
Weight per dozen	531/4 lbs.	48 lbs.	45 lbs.	42 lbs.
List price, each	<b>\$</b> 6.00	\$5.80	\$5.40	\$5.40
Packed 1/6 dozen in a pasteboard box and 3 dozen in a case	•		- '	

## Improved Ratchet Braces

Polished and nickeled forged steel alligator jaws	3.				
List Nos.	30	31	32	3 <b>3</b>	34
Size sweep	14 ins.	12 ins.	10 ins	8 ins.	6 ins.
Weight per dozen	45 lbs.	39 lbs.	36¾ lbs.	32¾ lbs.	30 lbs.
List price, each	<b>\$</b> 4.80	<b>\$</b> 4.60	\$4.40	<b>\$4</b> .10	<b>\$</b> 4.10
Packed 1/6 dozen in a pasteboard box.					



Nos. 1320 to 1324 Ratchet Brace



Corner Bit Brace

	Improved	Ratchet	Braces			
List Nos			1320	1321	1322	1323
Size sweep	<b></b>		14 ins.	12 ins.	10 ins.	8 ins
Weight per dozen			<b>42</b> lbs.	36 lbs.	33 ½ lbs.	
List price, each	• • • · · · • · · · · · · · · ·		<b>\$</b> 3.60	<b>\$</b> 3.40	<b>\$</b> 3.10	\$3.00
Packed 16 dozen in a pasteb	oard box and 3	dozen in a cas	se.			

#### Corner Bit Brace With Master Chuck

List Nos	502	5~3
Size sweep	10 ins.	8 in 3.
Weight per dozen	57 lbs.	55 lbs.
Length	$17\frac{1}{2}$ ins.	17½ ins.
List price, each	<b>\$</b> 7.20	\$6.60
Packed 16 dozen in a nastahoard hox		



Tools and Construction Appliances

List No. 980



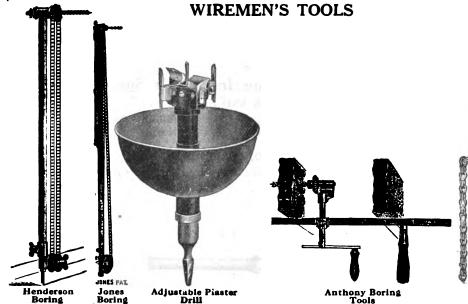
No. 980 Hand Drill	Weight Per Doz.	List Price Each
Hand drill; length without handle 10 inches, with 15½ inches		\$6.00

Universal	Angular	Bit	Stock

With Master Chuck  108 Angular bit stock; length when at 180°, 12½ inches	26 lbs.	<b>\$3.7</b> 0
Packed 1 in a pasteboard box.	T	
Delivery F. O. B. Factory, Millers Falls, Mass. For warehouse deliveries write a	earest house	J.

49

Boring Machine

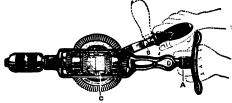


No. 718 Chain Drill Anthony Boring Tools

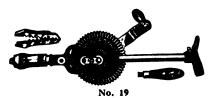
Libu	List
No.	Price
760567	Henderson Boring Machine. For boring joists for electric light wiring. Nickel plated, with ball bearing shaft universal bit holder. Extends to 12 feet and telescopes to 5 feet
<b>76056</b> 8	Jones Convertible Boring Machine. For boring under condition to be met with in wiring. Standard bit chuck complete.
760570	Anthony Boring Tool. Takes standard ½ in. round shank machine bit. Kegway cut in shank
762063	Adjustable Plaster Drill. Can be used over 3% in. or ½ in. gas pipe. For cutting away plaster or wood on ceiling or wall of finished houses or anywhere a concealed job is required
718	Chain Drill. Length 11½ ins., weight 4½ lbs



Breast Drill No. 13



Breast Drill No. 87





#### Breast and Hand Drill

List			**List Price
No.		Lbs., Each	Each
. 13	Breast drill, double gear, 6 in. drive wheel	6	<b>\$</b> 8.40
12	Breast drill, ball-bearing changeable gear	$6\frac{1}{2}$	6.30
87	Breast drill, 2 speed 2¾ to 1 and even	8	13.00
19	Breast drill, cut gears, ball thrust bearing	$6\frac{1}{4}$	4.86
5	Hand drill, cut gears, ball thrust bearing		4.50
	*Delivery F.O. B. Factory, Charlotte, N.C., ttDelivery F.O. B. Factory, New	York City	<b> Delivery</b>

F. O. B. Factory, Charlotte, N. C. ‡‡Delivery F. O. B. Factory, New York City. \*Delivery F. O. B. Factory, Chicago, Ill. \*\*Delivery F. O. B. Factory, Millers Falls, Mass. For warehouse deliveries write nearest house. Digitized by GOOLE
Tools and Construction Appliances

#### **MECHANICS' TOOLS**



## Wireman's and Telephone Installer's Special

## KNOWN AS NO. 8A AND No. 9A

Length of twist on both No. 8A and No. 9A, 4½ inches. Length over all, 18 inches. Style of crimp and screw on No. 8A and No. 9A same as No. 8 and No. 9.

#### COARSE THREAD, POLISHED

This bit is designed especially for electricians' use, is a self feeder, pulls itself right into the work, and will bore about twice as fast as the ordinary bit.

Size, ins	5/8	11
*List price, each		
Weight per doz. lbs	53/8	$5\frac{7}{8}$



#### Electrician's Bit No. 9

Size, ins., packed 6 in box	5/8	<del>11</del>	3/4
*List price, each	\$1.00	\$1.20	\$1.20
Weight per dozen lbs	21/8	3	31/4



This bit is designed especially for electricians, using boring machines where work is to be performed in limited space.

#### Electrician's Bit No. 5

Size, ins., packed 6 in box	1/4	5	3/8	176	1/2	*	5/8	++	3/4	H
*List price, each								\$1.20	\$1.20	\$1.30
Weight per dozen, lbs										21/4
Size, ins., packed 6										
in a box	15	1	11/8	11/4	13/8	11/2	13/4	$1\frac{7}{8}$	2	$2\frac{1}{16}$
*List price, each \$1.30	\$1.50	\$1.50	\$1.80	\$2.00	\$2.20	\$2.50	<b>\$</b> 3.20	<b>\$</b> 3.50	<b>\$</b> 3.80	\$4.10
Weight per doz., lbs. 23%										



#### Extension Bit Holder No. 5

Four reliably strong, steel jaws, made in one piece, grip firmly over shoulder of bit stock shanks. Bit inserted or released instantly when desired. Polished and nickel-plated steel. Follows bits 5% inch and larger into their bores.

Length	12 ins.	15 ins.	18 ins.	21 ins.	24 ins.	30 ins.
Weight, per dozen	7 lbs.	8 lbs.	9 lbs.	10 lbs.	11 lbs.	13 lbs.
*List price each			<b>\$2.00</b>	\$2.10	\$2.20	<b>\$2.30</b>

\*Delivery F. O. B. Factory, Wallingford, Conn. For warehouse deliveries write nearest house.

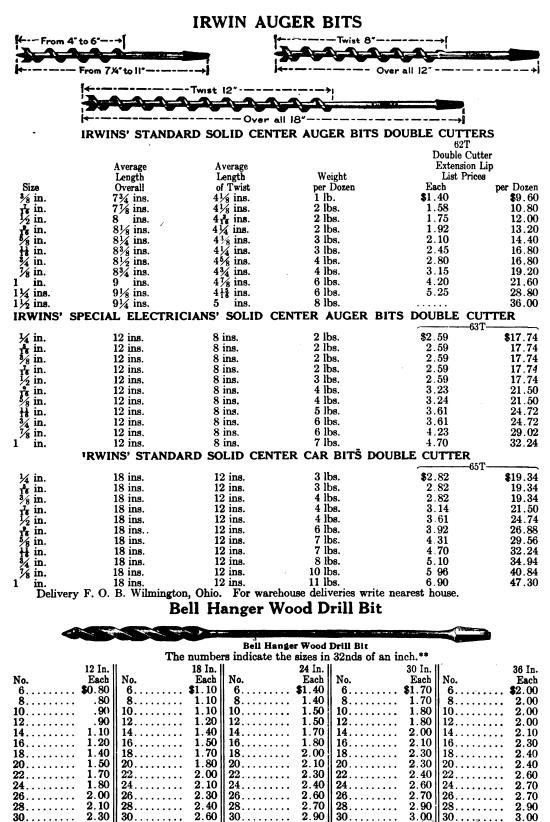
2.40 2.60

70 |

2.

32.....

36......



3.00 3.00 5.20

32....

36.....

 $\frac{3.00}{3.00}$ 

3.20 | 36......

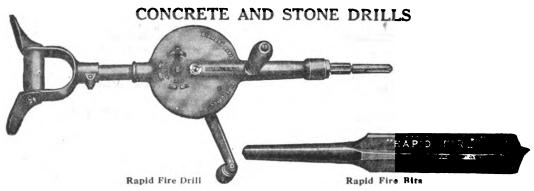
3.00

2.70 2.90

32.....

3.00 | 36.....

**\$8.8**8



Diamo	nd	Ran	id	Fire	Drill
Diamilo	u	1/ap	, Lu	1 11 6	$\boldsymbol{\nu}$

List No. 761539	Diamond Rapid Fire Drills (without points)	List Price Each \$35.20
List No.	Rapid Fire Bits	List Price per Set

List No.	Diameter	Overall Length	Depth of Hole Drilled	List Price per Dos.
761541	¼ in.	41/4 ins.	3 ins.	\$10.20
761542	15 in.	4½ ins.	3 ins.	10.20
761543	3/g in.	4 1/4 ins.	3 ins.	10.20
761544	7 in.	41/4 ins.	3 ins.	10.80
761545	½ in.	6 ins.	4½ ins.	12.00
761546	5∕8 in.	6 ins.	4½ ins.	4.40
761547	3∕₄ in.	6 ins.	4½ ins.	16.80
761548	$\mathcal{V}_8$ in.	$6\frac{1}{2}$ ins.	5 ins.	19.20
761549	1 in.	$6\frac{1}{2}$ ins.	5 ins.	21.60

EXTRA LENGTH OF DRILL POINTS 12, 18 and 24 INCHES

List Price per Dozen List Length List Diameter Length Length Diameter Length Length Length 18 Ins. of Drill 12 Ins. 18 lns. 24 Ins. No. of Drill 12 Ins. 24 Ins. No. 761550 ¼ in. \$11.34 \$14.67 \$18.00 761557 \$21.33 \$26.67 \$30.00 ₹ in. 14 in. 18 in. 18 in. 12 in. 15 in. 15 in. 33.33 761551 11.34 14.67 18.00 761558 in. 24.00 30.00 1 ½ ins. 1 ¼ ins. 1 ¾ ins. 42.67 53.33 761552 18.00 32.00 37.33 11.3414.67 761559 46.67 761553 40.00 12.0015.3418.67 761560 761554 13.33 16.67 20.00 761561 53.33 60.00 66.67 16.00 23.34 74.67 **7**6155**5 2**0.00 66.67 82.67 761562  $1\frac{1}{2}$  ins. 18.67 23.34 26.67 761556 in.



Hammer Drill







1/4 x 6" Drill Point

#### Peirce Hammer Drill

This tool offers the one quick means of drilling holes easily in brick, stone and concrete. It takes various sizes of drill points, which are quickly removed for sharpening. The guard on chuck has been enlarged to better protect the hand. The collar is welded to rod instead of being brazed. The dumb-bell is made of malleable iron.

List	†I	ist Price	List	; †L	ist Price
No.	Description	Each	No.	Description	Each
50 Hammer drill, o	only for ¼ in. bolts	\$9.16	60	5/8 x 6 in. drill point, for 3/8 in. bolts	\$1.84
	only for 3g in. bolts			5/8 x 12 in. drill point	2.30
	oint	1.26	<b>62</b>	<b>% x</b> 6 in. drill point	2.16
	oint, for ¼ in. bolts			<b>34</b> x 12 in. drill point	2.60
	oint	1.40	64	1/2 x 6 in. drill point, for 1/2 in. bolts	2.10
59 1/2 x 12 in. drill	point	1.54	65	<b>⅓</b> x 12 in. drill point	2.78

\*Delivery F. O. B. Factory, Bayonne, N J. †Delivery F. O. B. Factory, Pittsburgh, Pa. For ware-house deliveries write nearest house.

Total deliveres write hearest house

#### DRILL HOLDERS AND POINTS



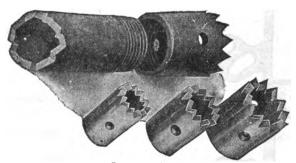
## Diamond "N" Brand Drills Drill Holder and Points

The taper shank on the drill point is carefully machined to fit the holder. The transverse hole in the handle is to admit a tapered pin which drives out the point when it is to be removed.

List Price per Dozen

			"Dia	mond N" Drill I	oints		
Holders	1/4 In.	3 In.	3 g In.	7 In.	⅓ In.	5∕8 In.	¾ In.
<b>\$24.</b> 00	<b>\$</b> 8. <b>5</b> 0	<b>\$</b> 8.50	<b>\$</b> 8. <b>50</b>	<b>\$</b> 9.00	<b>\$</b> 10.00	<b>\$</b> 12.00	<b>\$</b> 14.00
	List Price in	sets				\$6.00	

Each set comprises 1 holder, 1 ejector pin and 6 points assorted of any of the following sizes:  $\frac{1}{16}$  inch,  $\frac{3}{16}$  inch,  $\frac{1}{16}$  inch,  $\frac{1}{16}$  inch,  $\frac{1}{2}$ 



"Diexco" Extension Drills

Diexco Drill Heads are not made from steel tubing, but are turned from solid bar of best refined tool steel and carefully tempered so as to give the correct combination of hardness for the cutting edges and sufficient ductility to prevent breaking under hardest blows of the hammer.

	List per Dozen for Each Size											
Drill Head	Size Pipe	Diameter	List Price	Drill Head	Size Pipe	Diameter	List Price					
No.	for Handle	of Hole	per Doz.	No.	for Handle	of Hole	per Doz.					
2	⅓ in.	🔏 in.	\$5.10	8	1 in.	2 ins.	<b>\$</b> 21.60					
3	1/4 in.	₩ in.	5.10	9	1 in.	2¼ ins.	<b>32.40</b>					
4	3/8 in.	$\frac{7}{8}$ in.	5.10	9 <b>A</b>	1 in.	$2\frac{1}{2}$ ins.	<b>39</b> .60					
5	⅓ in.	1 in.	5.10	10	1 in.	$2\frac{3}{4}$ ins.	48.60					
5A	⅓ in.	$1\frac{1}{8}$ ins.	6.48	10 <b>A</b>	1 in.	3 ins.	55.80					
6	3∕4 in.	$1\frac{1}{4}$ ins.	7.56	11	1¼ ins.	$3\frac{1}{4}$ ins.	64.80					
6 <b>A</b>	3/4 in.	$1\frac{3}{8}$ ins.	13.50	11A	1¼ ins.	$3\frac{1}{2}$ ins.	<b>72.00</b>					
7	3∕4 in.	1½ ins.	16.20	11B	1¼ ins.	$3\frac{3}{4}$ ins.	<b>79.20</b>					
7A	1 in.	1¾ ins.	18.90	12	$1\frac{1}{4}$ ins.	4 ins.	86.40					



rour Point Drill

## "Diamond N" Four Point Drill

List Price per Dozen										
Diameter of drill	1/4 in.	5 in.	3∕8 in.	15 in.	⅓ in.	% in.	3/4 in.	⅓ in.	1 in.	
Length, 8 ins	<b>\$</b> 7.42	\$7.42	<b>\$</b> 7.42	<b>\$</b> 7.8 <b>4</b>	<b>\$</b> 8.68	\$10.48	<b>\$12.34</b>	<b>\$</b> 13.78	<b>\$</b> 15.30	
Length, 12 ins	<b>7.6</b> 6	7. <b>6</b> 6	7.66	8.16	9.00	10.80	<b>12.€0</b>	14.40	16.20	
Length, 18 ins	9.70	9.70	9.70	10.36	11.26	13.50	15.76	18. <b>00</b>	20.26	
Length, 24 ins	12.16	<b>1</b> 2.16	12.16	12. <b>20</b>	13.50	15.76	18.00	2 <b>0</b> °. <b>26</b>	22.50	
Diameter of drill. 11/8 ins.	11/4 ins.	1% ins.	11/2 ins.	1% ins.	13/4 ins.	1 1/2 ins.	2 ins.	$2\frac{1}{4}$ ins.	$2\frac{1}{2}$ ins.	
Length, 12 ins. \$21.60	\$27.00	<b>\$</b> 36.00	<b>\$</b> 45.00	\$54.00	<b>\$</b> 67.50	\$81.00	<b>\$94.50</b>	\$121.50	\$149.00	
Length, 18 ins. 25.20	31.50	40.50	<b>50.40</b>	<b>5</b> 9.4 <b>0</b>	72.90	<b>87.30</b>	100.00	130.50	151.50	
Length, 24 ins. 28.80	<b>3</b> 6.00	45.00	<b>55.80</b>	64.80	<b>78.30</b>	9 <b>3</b> .60	108.00	149.00	175.50	

Delivery F. O. B. Factory, Garwood, N. J. For warehouse deliveries write nearest house.

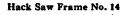
## **MECHANICS' TOOLS**

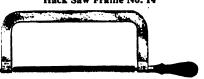


## Hand Saws

List No.		*List Price    Each	No.		List Price Each
100100	10 III. Danei saw	2 (8) (1	760761	22 in. panel saw	\$2.50



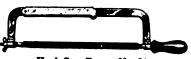




Hack Saw Frame No. 15



No. 1011



Hack Saw Frame No. 26

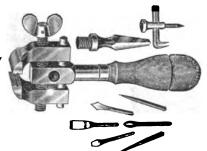


No. 10

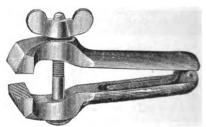
## Hack Saw Frames

List No.	*List Price   Each	List No.	*Li		rice Cach
14 1011	12 in. inside frame to tooth edge	15 Dept	Polished and nickeledth, 51/4 inches for 12 inch blade.	<b>\$</b> 2	40
10	Blades from 8 to 12 ins., polished and nickeled	26	Steel frame, nickel reversible frame.	1	. 25

List No.	Hack Saw Depth Gauge No. 53	List Price Each
53	Pressed steel, length 7½ ins.	\$0.50





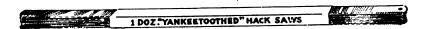


No. 3 Hand Vise

## Hand Vises

List No.		Length Inches	Width, Jaw Inches	Jaw Open Inches	Wt., per Doz. Lbs.	*List Price
1	Hand vise		11/4	11/8	12	\$4.00
3	Hand vise		_		$13\frac{1}{2}$	1.50
	*Delivery F. O. B. Factory, Millers Falls, Mass	. For	warehousc_del	iveries wr	te nearest ho	use.

#### "YANKEETOOTHED" HACK SAW BLADES



### "Yankeetoothed" Hack Saw Blades

#### All Hard-For General Machine and Structural Iron Work

#### Flexible Back-For Steamfitters and Electricians

Made with 14, 16, 18, 24 and 32 teeth to the inch.

Use 14 or 16 teeth for general work.

Use 18 or 20 teeth for pipe and light stock.

Unless otherwise stated we furnish 8 or 9 inch blades with 16 teeth and larger blades with 14 teeth to the inch.

ALL HARD AND FLEXIBLE BACK BLADES	List
Description	per Gross
8 x 1/4 in., .025 or 23 gauge	\$11.20
9 x 1/4 in., .025 or 23 gauge	12.60
10 x ½ in., .025 or 23 gauge	14.00
11 x ½ in., .025 or 23 gauge	15.40
12 x ½ in., .025 or 23 gauge	

Lengths given are from center to center of hole.

"Yankeetoothed" Flexible Back Blades are hardened on the teeth only; the back is flexible, making it impossible to break the blade while it is in the frame.

# "YANKEETOOTHED" High Speed Power Blades

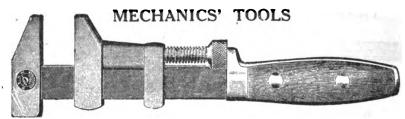
# "YANKEETOOTHED" HACK SAW BLADES Semi-high Speed Power Blades

			Teeth	List Price				Teeth L	ist Price
Length	Width	Thickness	per Inch	per Gross	Length	Width	Thickness	per Inch p	er Gross
10 in.	3/4 in.	.049 or 18 ga.	10, 14	\$27.30	8 in.	🧚 in.	.028 or 22 ga.	14, 18, 24	\$12.60
10 in.	i in.	.049 or 18 ga.	10, 14	34.30	8 in.	5/8 n.	.028 or 22 ga.	14, 18, 24	12.60
11 in.	3/4 in.	.049 or 18 ga.	10, 14	30.04	9 in.	9 in.	.028 or 22 ga.	14, 18, 24	13.44
11 in.	1 in.	.049 or 18 ga.	10, 14	37.74	9 in.	5 8 in.	.028 or 22 ga.	14, 18, 24	13.44
12 in.	3/4 in.	.049 or 18 ga.	10, 14	32.76	10 in.	$\frac{9}{16}$ in.	.028 or 22 ga.	14, 18, 24	14.28
12 in.	Î in.	.049 or 18 ga.	10, 14	41.00	10 in.	5% in.	.028 or 22 ga.	14, 18, 24	14.28
12 in.	1 in.	.065 or 16 ga.	10	52.92	10 in.	5% in.	.032 or 21 ga.	14, 18, 24	16.80
14 in.	3/4 in.	.049 or 18 ga.	10, 14	38.22	10 in.	3/4 in.	.032 to 21 ga.	14, 18, 24	18.90
14 in.	$\frac{3}{4}$ in.	.065 or 16 ga.	10	37.94	10 in.	ĺ in.	.032 or 21 ga.	14, 18, 24	26.60
14 in.	ĺ in.	.049 or 18 ga.	10, 14	48.02	11 in.	$\frac{9}{16}$ in.	.028 or 22 ga.	14, 18, 24	15.96
14 in.	1 in.	.065 or 16 ga.	10	61.74	11 in.	5/8 in.	.032 or 21 ga.	14, 18, 24	18.48
16 in.	3/4 in.	.049 or 18 ga.	10, 14	43.68	11 in.	3∕4 in.	.032 or 21 ga.	14, 18, 24	20.80
16 in.	3/4 in.	.065 or 16 ga.	10	59.30	12 in.	∯ain.	.028 or 22 ga.	14, 18, 24	17.64
16 in.	1 in.	.049 or 18 ga.	10, 14	<b>54</b> . 88	12 in.	5∕8 in.	.028 or 22 ga.	14, 18, 24	17.64
16 in.	1 in.	.065 or 16 ga.	10	70.56	12 in.	5∕8 in.	.032 or 21 ga.	14, 18, 24	20.16
17 in.	3∕₄ in.	.049 or 18 ga.	10, 14	46.42	12 in.	3∕4 in.	.032 or 21 ga.	14, 18, 24	22.68
17 in.	3∕₄ in.	.065 or 16 ga.	10	63.08	12 in.	1 in.	.032 or 21 ga.	14, 18, 24	32.04
17 in.	1 in.	.049 or 18 ga.	10, 14	58.32	13 in.	🤌 in.	.032 or 21 ga.	14, 18	<b>20</b> .94
17 in.	1 in.	.065 or 16 ga.	10	74.98	13 in.	% in. ⁵	.032 or 21 ga.	14, 18	21.84
18 in.	3/4 in.	.049 or 18 ga.	10, 14	49.08	13 in.	$\frac{3}{4}$ in.	.032 or 21 ga.	14, 18	24 58
18 in.	3/4 in.	.065 or 16 ga.	10	66.78	14 in.	9 in. 5/8 in.	.032 or 21 ga.	14, 18	22.54
18 in.	1 in.	.049 or 18 ga.	10, 14	61.74	14 in.	5∕8 in.	.032 or 21 ga.	14, 18	23.52
18 in.	1 in.	.065 or 16 ga.	10	79.38	14 in.	3/4 in.	.032 or 21 ga.	14, 18	26.46
19 in.	1 in.	.049 or 18 ga.	10, 14	65.18	14 in.	1 in.	.032 or 21 ga.	14, 18	37.24
19 in.	1 in.	.065 or 16 ga.	10	83.80	15 in.	3/4 in.	.032 or 21 ga.	14, 18	28.36
20 in.	1 in.	.049 or 18 ga.	10, 14	68.60	16 in.	5/8 in.	.032 or 21 ga.	14, 18	26.88
20 in.	1 in.	.065 or 16 ga.	10	88.20	16 in.	$\frac{3}{4}$ in.	.032 or 21 ga.	14, 18	30.24
21 in.	1 in.	.049 or 18 ga.	10	72.04	16 in.	1 in.	.032 or 21 ga.	14, 18	42.52
21 in.	1 in.	.065 or 16 ga.	10	92.62	17 in.	5∕8 in.	.032 or 21 ga.	14, 18	28.96
22 in.	1 in.	.049 or 18 ga.	10	75.46	17 in.	3/4 in.	.032 or 21 ga.	14, 18	32.14
22 in.	1 in.	.065 or 16 ga.	10	97.02	17 in.	1 in.	.032 or 21 ga.	14, 18	45.22
23 in.	1 in.	.049 or 18 ga.	10	78.90	18 in.	¾ in.	.032 or 21 ga.	14, 18	34.60
23 in.	1 in.	.065 or 16 ga.	<sup>,</sup> 10	101.42	18 in.	1 in.	.032 or 21 ga.	14, 18	47.88
24 in.	1 in.	.049 or 18 ga.	10	83.32	20 in.	1 in.	.032 or 21 ga.	14, 18	53.20
24 in.	1 in.	.065 or 16 ga.	- 10	105.84	24 in.	1 in.	.032 or 21 ga.	14, 18	63.84

Length of blades measure from center to center of holes, excepting 14 and 17 inch lengths. These measure 13½ and 16½ inches.

Length of blades measure from center to center of holes excepting 14 and 17 inch lengths. These measure 13½ and 16½ inches.

Delivery F. O. B. New York, N. Y. For warehouse deliveries write nearest house.



The Solid Handle Wrench

The head, bar shoulder and handle f	rame are	forged solid	of one piece	case harde	ned. The v	wrench is
finely finished.		•	-			
Inches 6	8	10	12	15	18	21
Will open, inches	11/4	13/4	$2\frac{1}{8}$	2 16	31/8	4
Weight per dozen 10 lbs.	17 lbs.	28 lbs.	40 lbs.	57 lbs.	84 lbs.	120 lbs.
Weight per case	110 lbs.	180 lbs.	260 lbs.	190 lbs.	180 lbs.	150 lbs.
List No. 100. Black, *per doz. \$13.49	\$14.98	<b>\$17</b> .98	<b>\$</b> 20.98	<b>\$</b> 35.96	<b>\$</b> 44.96	<b>\$</b> 53.94
List No. 150. Bright, *per doz 17.22	18.72	22.48	28.48	44.96	53.94	62.94

#### Pipe Wrenches

The wrenches are made from entirely new patterns, and the highest grade material is used in making them. They are finely finished. 10 Inches.... 36 48 18 24 14 1 to 5 Capacity, inches. 1/8 to 1/2 Weight, \*per doz. 4 lbs. 1/8 to 3/4 8 lbs. 1/8 to 1 17 lbs.  $\frac{1}{4}$  to  $1\frac{1}{2}$  33 lbs. 1/4 to 2 55 lbs. 1/4 to 21/2 1/2 to 31/2 180 lbs. 96 lbs. 300 lbs. \$14.82

**\$2.48** 

\$3.30

\$4.94



Length of blade, inches	12	Length of blade, inches	14
List No.	760706	Length of blade, inches List No	760707
List per doz	\$41.04	List per doz	\$47.88
	•		

#### Framing Chisels



	Bevel Back Framing Chisel			
Width of blade, inches	1	ī 1/4	2	
List No	760712	<b>7</b> 60714	760717	
List per doz	\$12.82	\$14.86	\$21.30	



\$1.64

**\$**1.64

\$1.88



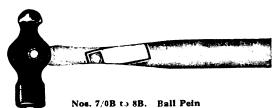
\$9.96

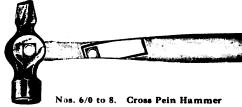
List No.	Lineman's Axe	List Price Each
760719	3½ lb. with handle	\$1 86
760720	5 lb. with handle	2 08

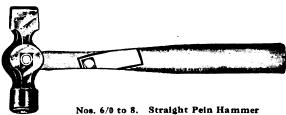
List			List Price				List Price
No.	Weight	Bit	Each	No.	Weight	Bit	Each
640	1 lb. 8 oz.	4 ins.	\$1.18	644	2 lb. 14 oz.	6 ins.	\$1.66
641	1 lb. 12 oz.	4 ½ ins.	1.30		3 lb. 4 oz.	6½ ins.	1 86
642	2 lb. 2 oz.	5 ins.	1.40	646	3 lb. 12 oz.	7 ins.	2.08
643	2 lb. 8 oz.	5½ ins.	1.50	647	4 lb. 4 oz.	716 ins.	2.50
	*Delivery F. O. B. 1	New York. For	warehouse de	eliverie	s write nearest ho		

Todis and Construction Appliances 58-1 & 59

### **HAMMERS**

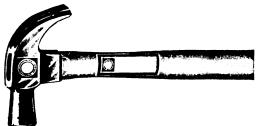






**BALL PEIN HAMMERS** Polished-White Hickory Handles

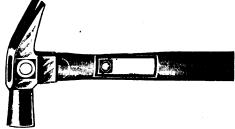
No.	Wgt. Ozs.	Length Over All, Ins.	Wgt. Lbs. Per Doz.	Per Dozen	No.	Wgt. Ozs.	Length Over All, Ins.	Wgt. Lbs. Per Doz.	Per Dozen
7 /0	2	10	33/	\$14.44	2	24	16	24	\$17.44
6/0	3	10	412	14.44	3	28	17	28	18.64
5/0	4	11	$5\sqrt{3}$	14.44	4	32	17	30	19.84
4/0	6	12	71/4	14.44	5	36	17	33	21.04
3/0	8	13	1013	14.44	6	40	171/2	36	22.86
2/0	12	14	14	14.44	7	44	171/2	41	24.64
0	16	14	16	15.04	8	48	171/2	4314	26.42
•	20	1.5	01	16 20 1	1				



Nos. 1 to 3. Adze Eye Nail Hammer

ADZE EYE NAIL HAMMERS

Polished—White Hickory Handles						
Number	1	11/2	2	3		
	20	16	13	7		
	14	13	13	12		
	2114	18/2	1414	91/2		
	\$22.22	20.96	19.72	18.50		



Nos. 1 and 11/2. Ripping Hammer RIPPING HAMMERS

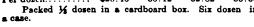
Polished—White Hickory H	landles	
Number	.1	134
Weight, ozs. Length, ins.	14	16 13
Weight, lbs. per doz	2134	1814 20.98
Per dozen	<b>\$</b> 22.22	20.96



Nos. 1 to 4. Double Face Engineers' Hammer

**DOUBLE FACE ENGINEERS' HAMMERS** 

Polished-	- Muite	DICKOLA 'UI	rugies	
Number	1	2	3	4
Weight, oss	24	38	48	58
Length, ins	15	16	17	1716
Weight, lbs. per dos.	22	3214	43	52
Per dozen	\$26.46	30.12	32.82	35.56
Packed 14 dozen	in a ca	rdboard box	r. Six d	ozen in





Nos. 0 to 7. Machinists' Riveting Hammer

#### MACHINISTS' RIVETING HAMMERS Polished-White Hickory Handles

I Change white thereby handles						
	Weight,	Length,	Weight	Per		
No.	ozs.	ins.	lbs. per dos.	Dozen		
0	4	11	614	\$13.58		
1	7	12	733	14.20		
2	9	13	914	14.80		
3	12	13	12	15.42		
4	15	14	16	16.02		
5	18	14	1814	17.28		
6	22	15	2012	18.50		
7	26	15	231/2	19.74		
Pack	ed 1/2 dosen in a	cardboard l	ox. Six dozen	in a case.		

#### CONDUIT TOOLS



Conduit Elbow Former

#### Standard Conduit Elbow Former

This is not merely a pipe bender; it is a practical conduit elbow former, which forms standard shaped elbows perfectly and accurately exactly where you want them. It saves time over the old method and saves material by eliminating the waste pipe.

List			Std.	*List Price
No.		Weight	Pkg.	Each
339	For ½ in. and ¾ in. conduit	31 lbs.	2	\$39.30



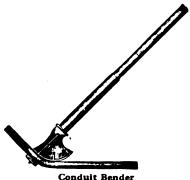
#### Fullman Conduit Bender

Instead of carrying the work back and forth to a bench for slight changes, the bender is applied to the spot as the work progresses. Is advantageous in fitting conduits neatly around other work—making offsets, curves, etc., after conduits are in place. The two forms enable the workmen to reach any part of the work—the 45° form being especially useful for reaching under walls and out-of-the-way places.

Unlike the old style gas "T" form of bender, this tool can be applied anywhere without having to slide

it over the pipe from one end.

List	<b>‡</b> I	ist Price	List	‡L	ist Price
No.		Each	No.		Each
900	½ in. 45° form	\$4.00	902	3/4 in. 45° form	\$5.00
901	$\frac{1}{2}$ in. 90° form	4.00	903	¾ in. 90° form	

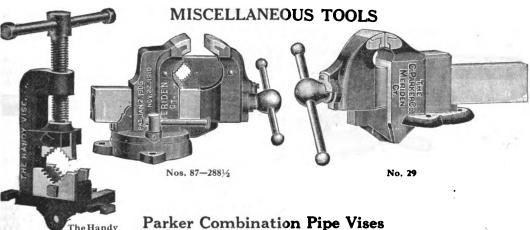


#### Rittenhouse Conduit Bender

This bender will not crush or kink the conduit. It is portable and you don't have to carry all your work to it. It will bend an offset or an L on any desired radius. It can be placed on the pipe at any point and does not slide on over the end.

ar any po	.,,.,	dow not space on over the one.	
List No.	Mfr. No.	###	List Price Each
761293	1	Bender complete, for 1/2 in. pipe	\$5.50
761294	ī	Bender head only, tapped for 11/4 in. pipe handle.	4.00
761295	2	Bender complete, for ¾ in. pipe	6.00
761296	2	Bender head only, tapped for 1½ in. pipe handle	4.50
761297	5A	Adjustable bender, for 1/2 and 3/4 in. pipe	7.50
761298	5A	Adjustable bender, head only	6.00

\*Delivery F.O.B. Factory, New York City. | Delivery F.O.B. Factory, Pittsburgh, Pa. 11 Delivery F. O. B. Factory, Honeoye Falls. For warehouse deliveries write nearest house.



	The Handy Park	ker Combination		
		SWIVEL BOTTOM	_	
7	The steel faces of Nos. 87-2881/2 are	milled and fitted to the jaws	, and are renewable.	
List	Weight	Jaw	Vise Ho	lds Pipe List Price
No. 87 88 2881/2	Lbs.			iches Each
87	41	35/8	434	2 \$15.80
88	59	4 1/8	6	3 19.74
288 1/2	105	4%	61/2	4 27.62
	I	Parker Neverbre	ak Vises	
	REINFO	RCED SLIDE SOLID JAW	STATIONARY VISE	
List	Width of	Vise	Wgt.	List Price
No.	Jaw, Ins.	Opens, Ins.		Each
29 39 49	31/4	4	31	\$15.02
39	31/4	614	47	16.80
49	41/4	7	66	21.60
59	434	8	81	28.20
69	514	9	123	39.02
79	61/4	91⁄2	150	57.60
List		Handy Dine	V:	List Price
No.		Handy Pipe	v 18e	Each
1	Handy Pipe Vise	. <b></b>		\$2.00
-	• •			

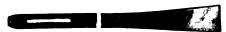


No. 45. Extra Refined Steel. Regular Taper





	and the second s	
Cape Chisels	Diamond Point Chise	els
CAPE CHISELS		
When ordering specify size of Cutting Edge and Number of Chisel desired.  Nos. 70 and 75. Forged from Jessop's English Octagon Steel. Polished Points.  50 and 55. Forged from Extra Refined Octagon Steel. Polished Points.	Black Finish Body. , Ebony Finish.	`
Nos. 150 and 155. Forged from Extra Refined Octagon Steel. Polished Points Cutting edge	3 6 614 \$3.60 \$4.66 \$4.66	9½ 13¾ \$6.12 \$8.00
DIAMOND POINT CHISELS		
When ordering specify size of Point and number of Chisel desired. Forged sar	ne as Cape Chisels.	
Point       1/4       2/8       1/2       Weight, lbs. per doz.         Diameter of steel, ins       5/8       5/8       3/4       Per doz., No. 55         Length, ins       71/4       7/4       7/4       Per doz., No. 55         Packed one-half dozen in a cardboard box.		7¼ 10¼ \$6.28 \$8.10
NO. 45—EXTRA REFINED OCTAGON STEEL—POLISHED AND GUN METAI	LED HEAD AND TAPER	R-NATURAL
FINISH BODY		
This Chisel is the Standard Pattern First Quality	•,	
Diameter of steel, ins	714 1924	1 1
Weight, lbs, per doz		8 '12 20 30
Per dozen	6.12 8.26 10	0.00 12.96



No.	14. Carpenters' Wrecking Chisel
	CARPENTERS' WRECKING CHISEL
Dlack	Finish Rody-136 inch Rit-Oil Tempered

Black	Finish	Body-1% inch	Bit—Oil	Tempered	
List	Length Ins.	Disc Oil Steel Ins.	Wgt. Per Dos.	List Price	List
No 14	14	% **	20 lbs.	Per Doz. \$8.94	12
				60-	2



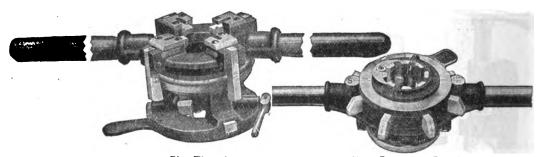
No. 12. Light Gooseneck Pattern Nail Puller LIGHT GOOSENECK PATTERNS Painted Black—Polished Ends

	ited Diack-Folished E	
Length	Disc Oil Steel Wgt.	<ul> <li>List Price</li> </ul>
Ins.	Ins. Per Do	Per Dos.
12	Digitiyed by 🔽 🔾 🖭	\$5.34
	Tools and Construct	

6

† List

#### PIPE THREADERS AND CUTTERS



Pipe Threader Becker-Receding Pipe Threader

No. 6 Beaverette Die Stock

List			List Price
No.		Threads	Each
51	Becker-Receding pipe threader	1 in. to 2 in.	<b>\$24</b> .00
761617	Extra dies, single set of 4 pieces		2.00

#### No. 6 Beaverette Die Stock

The No. 6 Beaverette die stock threads all sizes without change. List No. Weight

Price The combination threads pipe \( \frac{1}{4}, \frac{3}{8}, \frac{1}{2}, \frac{3}{4} \) ins. \( \frac{10}{10} \) lbs Extra dies, right or left, \( \frac{1}{8}, \frac{1}{4}, \) and \( \frac{3}{8} \) or \( \frac{1}{2} \) and \( \frac{3}{4} \) in \( \frac{10}{10} \). 10 lbs. each \$15.00 per set 5.00







No. 26 Beaver

#### No. 25 Beaver No. 25 and 26 Beaver Die Stocks

These tools have the alvantage of cutting all sizes (1, 1½, 1½ and 2 inch) without change of dies, and are adjustable to all sizes and variations from standard. Both the No. 25 and No. 26 are equipped with a universal chuck centering all sizes and avoiding the use of grip screws.

List No. 25 Weight Price each \$30.00 Combination threads pipe 1,  $1\frac{1}{4}$ ,  $1\frac{1}{2}$  and 2 ins...... 12 lbs. Extra dies threading all sizes.
Combination threads pipe 1, 1¼, 1½ and 2 ins. per set 5.50 30 lbs. 26 35.00 each Extra dies threading all sizes . . . . . per set



Beaver Square-end Pipe Cutter

Beaver Square-end Pipe Cutters

The construction of these tools consists of only two principal parts: A heavy frame with a fixed "V" guiding jaw, and a movable block with a "V" guiding jaw. Overhanding each guide jaw is a knife.

The 4 inch cutter has ratchet attachment. List †List Price Each No. Weight \$18.00 1 20.00 90.00 10 2 00 1 Extra set knives..... 2 50 Extra set knives..... Extra set knives.....

†Delivery F. O. B. Factory, Warren, O. ‡Delivery F. O. B. Factory, Bridgeport, Conn. For warehouse Digitized by GOOGLE deliveries write nearest house.

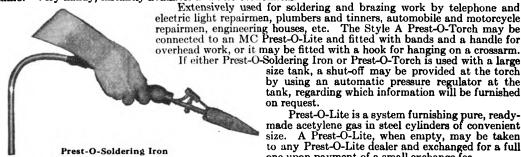
#### ACETYLENE SOLDERING AND BRAZING OUTFITS

In the electrical trade, the uses for the Prest-O-Soldering Iron and the Prest-O-Torch are almost without number

For soldering wire connections on switchboards, all kinds of shop work, overhead wire work, etc., the Prest-O-Soldering Iron saves valuable time, labor and operating costs as well. The heating flame burns inside the copper head of the iron, maintaining an even temperature, and will not blow out in high winds. Ideal for work in cramped quarters.

The Prest-O-Torch (Style A, B and C) is a blow torch, providing an intense heat in a concentrated

Very handy, instantly available and also economical.



electric light repairmen, plumbers and tinners, automobile and motorcycle repairmen, engineering houses, etc. The Style A Prest-O-Torch may be connected to an MC Prest-O-Lite and fitted with bands and a handle for overhead work, or it may be fitted with a hook for hanging on a crossarm. If either Prest-O-Soldering Iron or Prest-O-Torch is used with a large size tank, a shut-off may be provided at the torch

by using an automatic pressure regulator at the tank, regarding which information will be furnished on request.

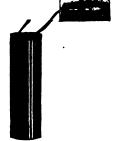
Prest-O-Lite is a system furnishing pure, readymade acetylene gas in steel cylinders of convenient size. A Prest-O-Lite, when empty, may be taken to any Prest-O-Lite dealer and exchanged for a full one upon payment of a small exchange fee.

Prest-O-Lites are manufactured under a special formula of The Prest-O-Lite Co., Inc., and are backed by a universal exchange system which includes practically all large cities and towns and most villages throughout the country.

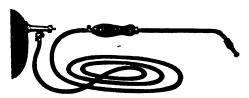
Prest-O-Soldering Iron

Prest-O-Soldering Iron as ordered is fitted with a 1 lb. soldering head of highest quality drop forged Each outfit includes 6 feet of rubber hose and a union for attaching to either Style MC or to Style B and E Prest-O-Lites, as specified.

List Price Each List No. Prest-O-Lite Soldering Iron, 1 lb. size..... 330935 \$8.00







Prest-O-Torch, Style C, With E, B, or A Cylinder

#### Prest-O-Torch

Style A torch has a heat sufficient for brazing steel up to  $\frac{3}{8}$  inch diameter. Style B torch gives a flame with an intense heat ideal for work of jewelers, dentists, etc. Style C provides a flame about three times as large as Style A and successfully brazes solid steel bars up to 2 inches diameter.

Style		Price Each			List Pri	ice Each
A	Torch	. \$1.50	C	Torch		<b>\$</b> 4.50
В	Torch	. 4.50	11			



Style MC



Styles A, B, E

#### Prest-O-Lites

Style		Contains		Dimensi	ons	List Price Complete	List Price Less Band
MC E B A	Motorcycle size Tank Tank Tank	30 cubic ft. gas 40 cubic ft. gas	16 20	ins. long, 6	ins. diam. ins. diam. ins. diam. 14 ins. diam. Tools and Co	_50.00	

# C. & L. Torches



List				List
No.	Description	Size	Weight	Each
32	No. 32 gasoline torch with hook and support for soldering copper.	Quart	41/4 lbs.	\$10.40
31	No. 31 same as No. 32 without hook	Quart	41/4 lbs.	9.88
	The burner is of special generator metal which holds the heat longer.	•		
30	No. 30 gasoline torch with hook and support for soldering copper	Quart	4 lbs.	<b>\$9</b> .88
29	No. 29 same as No. 30 without hook	Quart	4 lbs.	9.36
	Has automatic pump in handle. Burner of open type and the gas is sup	perheated b	efore it is bu	ned.
108	No. 108 gasoline torch with hook and support for soldering copper.	Quart	4 lbs.	\$8.84
107	No. 107 same as No. 108 without hook	Quart	4 lbs.	8.32
	Burner mounted in center of tank	•		











List				List
No.	Description	Size	Weight	Price
104	No. 104 gasoline torch with hook and support for soldering copper.	Quart	4½ lbs.	<b>\$9.36</b>
	Patented automatic pump with double spring automatic check valve	fitted in tan	ık.	
96	Torch for kerosene without soldering copper attachment	Quart	$6\frac{1}{2}$ lbs.	<b>\$</b> 11.44
	The improved construction of the burner and perfect combination	of the fuel	practically	eliminates
carl	oon deposits.			
95	Torch for kerosene without soldering copper attachment	Pint	$3\frac{1}{4}$ lbs.	<b>\$</b> 9.36
112	Torch for gasoline, with detachable soldering copper holder	Quart	41/4 lbs.	8.32
114	Torch for gasoline, with detachable soldering copper holder	Pint	3 lbs.	7.80













No. 38 Torch

No. 37 Torch No.

No. 120 Torch No. 47 Torch

No. 14

No. 28

List No. Description Size Size Gasoline torches with hook and support for soldering copper Pint Heavy gauge seamless drawn tank is fitted with automatic brass pump with	Weight 2 lbs. h automatic ch	List Each \$9.36 eck valve
insuring ample air pressure.		
120 Gasoline torch, with detachable copper holder	4 lbs.	\$7.80
The pump is fitted with single spring automatic check valve and forms the ha	ındle of the tor	ch.
106 Gasoline torch, with detachable soldering copper holder Pint	3 lbs.	<b>\$</b> 8.32
Fitted with an automatic brass pump with double spring check valve.		_
48 Gasoline torch, with soldering copper attachment Pint	3¾ lbs.	\$11.96
The pump which forms part of the handle is automatic.	0/4 .55.	•==
	1 Jh	\$5.20
A Acollor of gasonine torch, size 174 X 079 lins. Finish, brass mexercal	ماماه	<b>GO</b> . <b>2</b> 0
Alcohol or gasoline torch, size 134 x 6½ ins. Finish, brass nickeled.  A torch or blow pipe for electricians for producing a fine concentrated flame.	OUXIC	

Each

Shipping List Price

lbs. \$17.68 13.52

Weight

#### C. & L. FIRE POTS

No.







No. 5 Fire Pot





Nos. 71 and 72 Fire Pots for Gasoline

Tank is made of heavy gauge steel with bottom and fittings welded in, making it extra strong and durable; fitted with large funnel and filler plug. The burner represents the highest development of generating power and heat efficiency, quickly producing an ideal blue flame easily regulated, giving satisfaction in windy or zero weather. The burner is attached to a swivel joint which permits moving up or down.

FOR GASOLINE AND KEROSENE Nos. 1 and 5 Fire Pots for Gasoline



The hottest fire pot made for electricians and metal workers. It is smokeless, odorless and noiseless. Heavy gauge welted steel tank. A pot of lead can be melted and a pair of heavy soldering coppers heated at the same time. The burner has two heating surfaces. The gas is superheated before it is burned and gives an intensely hot flame, burning from each side to the center. A sub-flame for the generator permits the heating flame to be turned low, saving fuel expense.



No. 71 Fire Pot



No. 72 Fire Pot

### Nos. 20 and 10 Fire Pots for Gasoline

permits moving up or down.

20 One gallon with automatic pump....  $9\frac{3}{4}$  lbs. \$9.52 10 One gallon with rubber bulb......  $9\frac{3}{4}$  lbs. 8.40

Fitted with galvanized cast iron top plate and bottom ring. All small or light castings are malleable iron or brass. The coil and burner are steel. The needle point valves are fitted with stuffing boxes and are always tight and give perfect control of the fire.



No. 21 Fire Pot



No. 20 Fire Pot

### Nos. 21 and 11 Fire Pots for Gasoline

21 One gallon with automatic pump......9¾ lbs. \$13.44 11 One gallon with rubber bulb.........9¾ lbs. 12.32

The latest improved up-to-date coil fire pot made, with seamless drawn steel tank, large funnel and filler plug, heavy uprights, large valve, heavy malleable top plate and one-piece steel shield.



No. 221 Fire Pot No. 222 Fire Pot No. 223 Fire Pot For Kerosene

# Nos. 221, 222 and 223 Fire Pots for Kerosene

221 Seven pints capacity with shield for holding metal 223 Seven pints capacity with heavy round shield and bale handle. Electricians' style......13 lbs. \$22.88

These tanks are made of seamless drawn steel, with bottom and fittings welded in. The burner produces a powerful heat and is free from smoke; an excellent fire pot for outside work, or where insurance restrictions forbid the use of gasoline. Give good service under severe weather conditions.

TURNER GASOLINE TORCHES









	No. 203 No. 20 No. 21	No.	. 202
List	Quart Torches Polished Brass	Shipping	List Price
No.		Wt. Lbs.	Each
	Equipped with latest burner with automatic pump in handle		<b>\$</b> 10.00
20	Powerful and very hot flame produced by patent coil burner	6	11.50
21	Efficient and exceptionally serviceable. Very hot	51/2	11.00
202	Furnished with hook and strap for holding soldering copper	51/2	11.00
71		• •	









	No. 224 No. 215			No. 425
224	Equipped for heating soldering coppers	· · · · · · · · · · · · · · · · · · ·	5	<b>\$9.50</b>
215	Strictly high grade, low priced torch.	Automatic pump in handle	5	8.50
223	Closed generator type for outdoor or in	ndoor use	5	9.50
425	Kerosene torch producing a powerful b	lue flame	51/2	12.00
		The second secon		









Soldering copper attachments included without extra charge. Packed loose with all torches except No. 20 and Double Jet Torches.

Double Jet Torches, Quart Sizes

92	Double jet Produces nearly double the heat of single jet torches	5	\$13.34
96		· 5½	15.60
	Double jet. Large burner is protected for outdoor work by wind shield	634	17.94









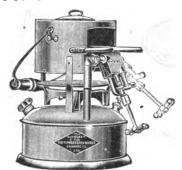
No. 418

315 302	Equipped with burner having soldering iron attachments.  Same type as No. 215. Meeting demand for a low-priced tool.  Equipped with infroved burner with holder and pump.  Auto type. Will fit in tool box.	21/2 31/2 4 81/8	\$9.00 8.50 10.00 12.00
Tool	a and Construction Appliances 69	310	



No. 83

#### MISCELLANEOUS SUPPLIES



Nos. 34 and 36



No. 66 For Gasoline

List	lurner fire fots	Shipping	List Price
No	Description	Wt., Lbs.	Each
83	Seven Pints, "Hot Blast," with improved burner for kerosene	161/2	<b>\$</b> 19. <b>76</b>
3.1	Seven Pints, "Hot Blast," galvanized steel tank	. 17	17.68
36	Five Pints "Hot Blast." galvanized steel tank	. 14	13.52
66	Seven Pints, drawn steel tank with automatic pump	143/4	12.48



Lineman's Torch



Torch and Shield Detacher



Rite Quick Soldering Tool

"B" Telephone Kerosene Furnace

#### Stavsalite Lineman's Torch

This lineman's torch stays lit in a wind. It is light and small. It is lit and extinguished in a moment as wanted. It has no adjusting parts, therefore it cannot get out of order. It is hung directly on the wire

under 1	the joint to be soldered and is provided with a cup for holding soldering paste.		
List	in joint to be constructed in the construction of the construction	Weight	*List Price
		Each	Fach
No.			
3420	Staysalite Lineman's Torch	1 1/4 lbs.	\$8.00

Rite Quick Soldering Tool
The Rite Quick Soldering Tool is quick and efficient. It makes a perfect and even joint, and furnishes a joint in ball rather than point, greatly reducing the possibility of grounds through careless taping. It can be heated in a coal fire, over a gas range, in a blow torch or any handy source of heat. The bowl turns on a pivot so it is impossible for the solder to spill. A set screw permits the handle to be lengthened to accommodate different heights of ceiling. Rite Quick Soldering Tool..... 762021

Telephone Kerosene Furnace

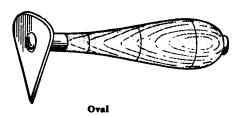
This furnace is especially adapted to the use of telephone and telegraph companies. It is economical because 2 quarts of kerosene will burn as long and do as much work as 4 quarts of gasoline, a saving of one half. It is safe, because kerosene can be carried with much less danger of being ignited and causing damage by fire. It is durable because the reservoir (or body) is made entirely of heavy metal, and all joints are autogeniously welded by the oxy-acetylene process. The burner is so constructed that it can be easily taken apart and cleaned of any carbon deposit. List Price Each

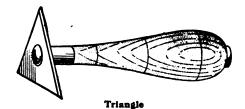
762023 Kerosene furnace—capacity 3 quarts \$19.40

\*Delivery F. O. B. Factory, Chicago, Ill. †Delivery F. O. B. Factory, New York City. \*Delivery F. O. B. Westport, Conn. ††Delivery F. O. B. Factory, Newark, N. J. For warehouse deliveries write

nearest house.

#### CABLE TOOLS





Scrapers





List	Cable Splitting Knives	Weight	List Price
No.		per Doz.	Each
1515-1 1515-2	Cable splitting knife, with leather handle	6³⁄a lbs.	\$2.50 2.00





Cable Stripper Knife No. 1560-1

Cableman's Saw

Cable Stripper and Cable Saw

List
No.
1560-2 Cable stripper knife, polished, with 3½ inch blade, length overall 8½ inches... 2½ lbs.

Klein's Cableman's Saw

Cable Stripper And Cable Saw

Weight List Price per Dos. Each
2½ lbs. \$2.50

This saw is particularly recommended for use on cable work. One side has coarse teeth for cutting through lead cable sheath, while the other has finer teeth for cutting through the wire core. The saw is made of silver steel, with apple handle fastened by three brass screws passing through the blade and into brass flush nuts on the other side. Length of blade, 14 inches. Length over all, 18 inches.





Boxwood Dresser Boxwoo

List No.	Shaping Tools	List Price Each
7900	Boxwood dresser for shaping lead sleeves, lead pipe, etc	
<b>770</b> 0-1	Boxwood turn pin, size 1 in.	, <b>.8</b> 0
7700-2	Boxwood turn pin, size 2 in	8∪
7700-3	Boxwood turn pin, size 3 in.	. 80

Note: Boxwood turn pins are for expanding ends of lead pipe, lead sleeves, potheads, etc.

Tools and Construction Appliances

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### SOLDERING ACCESSORIES







Wiping Cloth



Charcoal Soldering Furnace, Galvanized Iron

	rons. Opening in top admits o inch meiting pot.	rurnace
is provided with grate.		List Price
No.	Weight	Each
3550-6 With removable cast iron top		<b>\$</b> 10. <b>00</b>

Melting	Pots
Tint Dring	Tink

List		List Price	148£	•	List Price
No.		Each	No.		Each
3325–5 3325–6	5 in. cast iron pot 6 in. cast iron pot	\$1.30 1.60	3325-8	8 in. cast iron pot	\$3.00

# Wiping Cloths

	For W	iping Lead Joint	s, Etc.	
8301	Moleskin	<b>\$</b> 0.80    8300	Ticking	<b>\$0.60</b>

### Pouring Ladles

				•	
3300-21⁄2	2½ in. bowl	\$1.10    3300-3	3	in. bowl	\$1.40



# Pony Soldering Coppers

#### Fitted with Black Lacquered Handles

Specially adapted for electrical work. Made of pure copper, tinned.

		Length of					Length of			
List		Handle,		List Price	List		Handle,		List Price	
No.	Size	Inches	Weight	Each	No.	Size	Inches	Weight	Each	
51	No. 1 copper	121/2	$5\frac{1}{2}$ oz.	\$1.20	54	No. 4 copper	83/4	1 oz.	<b>\$0.</b> 60	
52	No. 2 copper	113/2	3 oz.	1.00	55	No. 5 copper	834	<b>7</b> ∕8 02.	.40	
53	No. 3 copper	91/2	1¾ oz.	.80	l	••				

### Standard Soldering Coppers

3 lbs. to pair and heavier, without handles.	
2½ lbs. to pair, without handles.	Prices
2 lbs to pair, without handles.	on
2 lbs. to pair, without handles. 11/2 lbs. to pair, without handles.	Application
1 lb to nois without handles	<b>.</b>

Pointed soldering coppers with handles 7 inches long by 15 and 36 inch diameter, weighing 2 lbs. to 6 lbs. to pair inclusive, can also be furnished.

#### STEEL MEASURING TAPES







No. 110 Steel Nickel Case

No. 300 Small Spring Pocket. Steel Tape

No.250 In Leather (Steel Lined) Case

Western Electric Steel Measuring Tapes

These tapes are marked by the "quick reading" method. Total number of feet is plainly marked ahead of each inch or tenth figure, giving the measurement at a glance.

Nos. 110 and 111 are of the finest quality, 3/8 inch wide, with extra strong steel nickel-plated case:

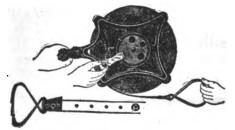
flush handle with patented automatic handle opener.

Nos. 250 and 251 are of the finest quality, 36 inch wide, with hard leather, steel lined case, nickelplated trimmings, flush handle, automatic opener. List Dries Fach

			List Price	Lacn	
List No.			50 Ft.	75 Ft.	100 Ft.
	Marked feet, 12ths and 8ths		<b>\$</b> 5.10	<b>\$</b> 6.76	\$8.62
	Marked feet, 10ths and 100ths		5.10	6.76	8.62
250	Marked feet, 12ths and 8ths	4.88	6.00	7.88	12.12
251	Marked feet, 10ths and 100ths	4.88	6.00	7.88	12.12
		_	_		

Western Electric Small Spring Pocket Steel Tapes

Tape 1/2 inch wide, furnished with an extra fine nickel-plated case; spring wind with center stop. List No. List Price Each 300 36 inches, marked inches and 16ths...... \$1.20 60 inches, marked inches and 16ths.... 301 1.59 72 inches, marked inches and 16ths.... 302 1.60303 10 feet, marked feet, inches and 16ths.... 2.30 304 12 feet, marked feet, inches and 16ths.... 3.70







100 Foot Style

200 Foot Style

Western Electric Steel Measuring Tapes on Pat. "Electric" Reels

Tape is ¼ inch wide, of fine quality and extra strong. It is graduated every foot and each end foot is either in 10ths or 12ths. Each tape is furnished with an extra fine and strong reel and pair of handles. Tape reels and unreels quickly and is easily detached. Especially adapted for general and rough work.

List No.		Price Each
1 A	100 feet long, graduated every foot, each end foot 10ths	<b>\$7</b> .50
1B	100 feet long, graduated every foot, each end foot 12ths	7.50
11A	200 feet long, graduated every foot, each end foot 10ths	15.76
11B	200 feet long, graduated every foot, each end foot 12ths	15.76
301	300 feet long, graduated every foot, each end foot 10ths	21.00
30B	300 feet long, graduated every foot, each end foot 12ths	21.00
444		

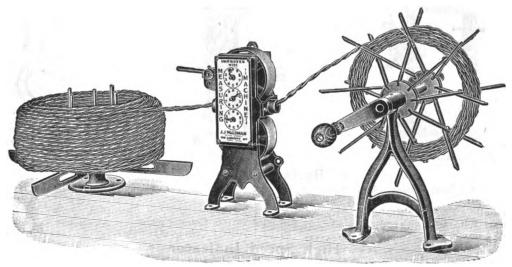
Western Electric Extra Long and Narrow Steel Tape Measures

Especially adapted for long distance work, measuring across streams, ravines, etc. Tape is 1/4 inch

Each tape is furnished with an extra fine reel and pair of handles. Tape wide, fine quality and very strong. Each tape is furnished with an extra fine reel and pair of handles. reels or unreels quickly and is easily detached.

025A	300 feet long, graduated every five feet, each end foot 10ths	<b>333</b> .00
525B	300 feet long, graduated every five feet, each end foot 12ths	<b>33</b> .00
526A	300 feet long, graduated every foot, each end foot 10ths	48.00
526B	300 feet long, graduated every foot, each end foot 12ths.	48.00
0-02	500 loca long, graduated cross story such site root == sand friging driver	

### MEASURING TOOLS AND COUNTERS



Folding Reel

Measuring Machine

Wire Winder

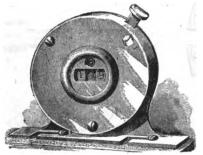
#### Wire Measuring Outfit

This measuring outfit measures quickly and accurately all wires from No. 0 to No. 40, inclusive. It can also be used for measuring lamp cord, rope, tape, etc. It is made so that it may be fastened to either the counter or side wall and occupies but little space. It is indestructible and very neat in appearance, the winder and reel are so arranged that they may be closed when not in use, therefore occupying but little space.

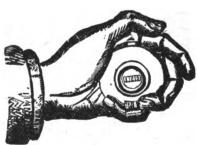
List		*List Price
No.	·	Each
761806	Folding reel	\$7.20
761807	Measuring machine	27.00
761808	Wire winder	12.00



Hand Tally Counter



No. 1 Tally Register



Pole Counter

# Veeder Set Back Hand Tally Counter

This counter is useful for many purposes. The case is small in size, with rounded corners so as not to irritate the hand of the user.

List No. 762016	Set Bac	k Hand Tally Counter	List Price Each \$6.00
List No.	Mfr. No.	No. 1 Tally Register	List Price Each
761702	0	With bracket	\$6.00
761703		With bracket	
761704	0	With safety pin	6.00
761705	1	With safety pin	8.00
List No.		Pole Counter	List Price Each
0	Pole counte	er, records 1 to 1000	\$5.00
1	Pole counte	er, records 1 to 10,000	7.00
*De	elivery F. O	er, records 1 to 10,000.  B. Factory, New York City. For warehouse deliveries write nearest hou	se.

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Tools and Construction Appliances

#### MEASURING TOOLS

Western Electric









High Speed Indicator

#### Reels and Meters

A most efficient device for measuring and reeling wire and cordage of various sizes.

	*	List Price	1		*List Price
	Description	Each	List No.	Description	Each
761000	Wire meter with reel	<b>\$</b> 48. <b>00</b>	761002	Counter meter	<b>\$</b> 31.60
<b>7610</b> 01	Meter only	30.72	761003	Cable meter only	<b>48.00</b>

High Speed Indicator

This indicator may be run at highest speed required without heating, and this on account of the frictionless bearing against which the inner end of the spindle revolves. The dial plate has two rows of figures, reading right or left, as the shaft may run.

List No		Price Each
104	Complete with rubber tips	<b>\$3.00</b>
106	Improved indicator, same as 104, with rubber handle and tips complete	4.00
109	Surface speed attachments for speed indicators	1.50
109-A	Leather case for speed indicator	1.50



B&S Wire Gauge



Micrometer Caliper

### Wire Gauge

These gauges are manufactured from the best steel, and are tempered, adjusted, and warranted accurate. Size 31/4 inches in diameter and 1/8 inch thick. In order to be familiar with the usage of these gauges with the decimal equivalents of the gauge numbers, we furnish both sizes with these decimal equivalents expressed in thousandths on the back, opposite to the regular gauge numbers.

List N		List Price Each
281	Size wire B.&S. gauge, 0 to 36, American standard	\$6.00
282	Size wire B.&S. gauge, 5 to 36, American standard	5.00
188	Size wire B.W.G. gauge, 1 to 36, English standard	6.00
189	Size wire B.W.G. gauge, 6 to 36, English standard	5.00

# Micrometer Caliper No. 2 English or Metric Measure

Measures all sizes less than one-half inch by one-thousandth of an inch. It is also made to measure all sizes less than 13 millimeters by hundredths of a millimeter. When so made the table of decimal equivalents is omitted.

761010 Range 0 to ½ inch, or 0 to 13 mm. with ratchet stop..... 215 12 Morocco case 1.30
\*Delivery F. O. B. Factory, Minneapolis, Minn. †Delivery F. O. B. Factory, Athol, Mass. ‡Delivery

F. O. B. Factory, Providence, R. I. For warehouse deliveries write nearest house.



#### ARC LAMP SUPPLIES



Mast Arm Rope

#### GALVANIZED MAST ARM OR ARC LIGHT ROPE

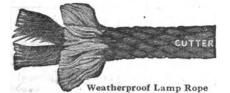
Standard strengths, adopted May 1, 1910 Used for arc lights, mast arms or other purposes where exposed to moisture. This rope is more durable than manila rope and does not shrink.

GALVANIZED SASH CORD Used for window weights, bell cords, automobile brakes, and whistles.  $\frac{3}{32}$  inch diameter is used on electric open car curtain fixtures.  $\frac{1}{16}$  inch diameter is used on steam car curtain fixtures.

		Weight	Approx. Breaking		*List	List	Diameter	Weight per Ft.	Approx. Strength	*List Price
List	Diameter		Stress	Con-	Price	No.	in Ins.	in Lbs.	in Lbs.	per Ft.
No.	in Ins.	in Lbs.	in Lbs.	struction	per Ft.	26	1/4	. 101	1650	\$0.10
230219	1/2	.335	4700	9 x 7	\$0.24	27	32	.077	1411	.09
230220	7 16	.245	3400	9 x 7	.20	271/2	16	.056	110 <b>0</b>	.08
230221	<b>3∕8</b>	.163	2200	9 x 7	.17	28	1/8	.025	425	.06
230222	16	. 107	1530	9 x 4	.12	281/2	37	.014	250	.05
230223	1/4	.077	1125	9 x 4	.10	29	16	.006	110	.04

#### **CUTTER'S EBONY WIRE ROPE**

A flexible wire rope with a black center of very flexible material. The only rope really pliable enough to work freely over standard types of pulleys. List No. Weight per 100 Ft. in Lbs. \*List Price per Foot 230230 Cutter's Ebony Wire Rope..... **\$0**.18





Samson Wire Center Cordage

#### **CUTTER'S WEATHERPROOF LAMP ROPE**

A fine braided cotton rope with a weatherproof finish, which keeps out the rain and makes it extra durable.

List No.	Diameter	*List Price p	er Lb.    List l	lo. Diameter			rice per Lb.
230231	18 in. 50 ft	. to a. lb	2.64   2302	34 ¾ in.	20 ft.	to a lbto a lb	<b>\$2.64</b>
230232	⅓ in. 40 ft	. to a lb	2.64   2302	35 ⅓ in.	12 <b>½</b> ft.	to a lb	2.64
230233	$\frac{5}{16}$ in. 32 ft	. to a lb	2.64				

#### SAMSON WIRE CENTER CORDAGE

Made of best Sarison stock, with center of galvanized steel wire, carried in mahogany color. List No. †List Price per Foot Size \$0.11 6 8 . 12



Samson Spot Cord

#### SAMSON SPOT WATERPROOFED CORD

The sizes most frequently used for hanging arc lamps are Nos. 12, 14 or 16; for trolley cord, Nos. 8, 9, 10 or 12.

It is put up in coils of about 1200 feet each.

List	•	Average Weight	†List Price	List		Average Weight	†List Price
No.	Diameter	per Coil	per Lb.	No.	Diameter	per Coil	per Lb.
8	⅓ in.	32 lbs.	\$1.50	12	3/8 in.	70 lbs.	<b>\$1.50</b>
9	📆 in.	40 lbs.	1.50	14	$\frac{7}{16}$ in.	90 lbs.	1.50
10	14 in.	50 lbs.	1.50	16	$\frac{1}{2}$ in.	115 lbs.	1.50

#### ONEIDA GALVANIZED CHAIN

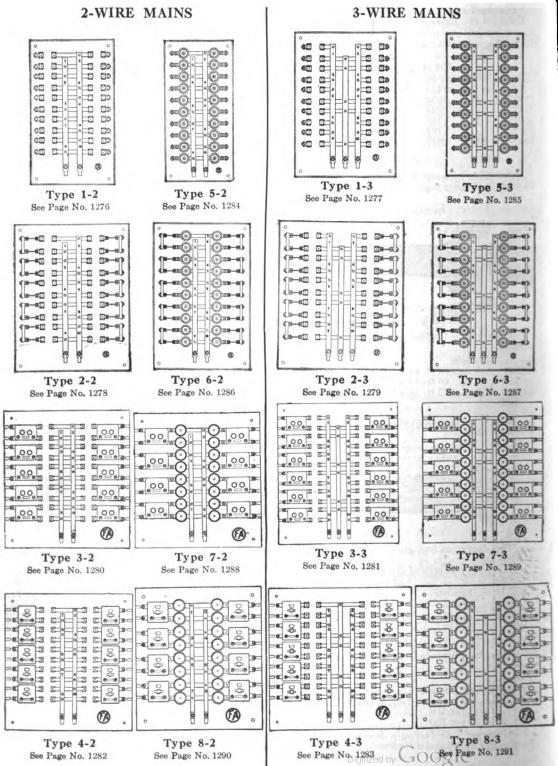
This chain is made from a steel case and is heavily hot galvanized. Guaranteed rust proof.

	Time charit is missic from a steel time in		er Barra-120an Galantiood Labe proon	
List		▲List    Lis	st	. ^List
No.		Price   No	) <b>.</b>	Price
1	For Arc Lamps per 100 Ft.	\$10.00   1	Rings per 100	<b>\$</b> 9.70
5	For Arc Lamps per 100 Ft.	9.30    5	Rings per 100	5.10
1	Hooks per 100		Links per 100	
5	Hooks per 100	3.30    5	Links per 100	1.28
	*D-1: D O D C(1 D 1 T 1	4D 11	O D Donton Mana ADalimana E O D	T.

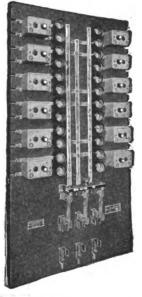
\*Delivery F. O. B. South Bend, Ind. †Delivery F. O. B. Boston, Mass. \*Delivery F. O. B. Rowe, N. Y. For warehouse deliveries write nearest house.

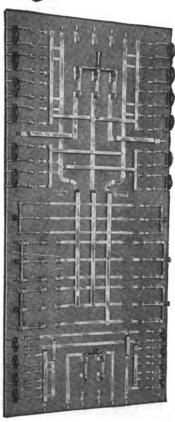
#### INDEX PAGE FOR

# PANEL BOARDS ®









# (FA) STANDARD PANEL BOARDS

Base Black slate, oil finish. Black enameled slate.

Marble, as specified.

Finish Main and branch bus bars polished

and lacquered.

Deduct 5% for all plain finish.

Voltage Spaced for 125, Special 250 volts

Capacity of Bus Bar

6-ampere for 125-volt, 2-wire. 3-ampere for 125-250-volt, 3-wire. Per Circuit

Fuse Connections for New Code enclosed fuses.

Edison plug fuses.

Open link fuse connections, same

price as enclosed.

Main Fuse With or without main fuses, as

above.

Main Switch With or without main knife switch.

Branch Switches With or without branch switches,

either 10-amp. push button, or 10-amp. indicating snap, or

30-amp. knife switches.

Knife Switches Weadvocate the use of knife switch-

es on panels for disconnecting cir-

cuits.

Snap or Push Button

Switches |

We advocate the use of either push button or indicating snap

switches for controlling lights from

panel.

Main Terminals will always be placed at bottom of board unless Main Terminals

specified at top.

#### SPECIAL PANEL BOARDS

We build special panels for any voltage, capacity or number of circuits, and bus bars for any system, all in accordance with specifications furnished by our customers.

> For 256 Volts-2-Wire Prices on Application For 250 Volts—3-Wire Prices on Application

#### METER CONTROL PANEL BOARDS

No office building, large or small, is complete without a system of Meter Control Panel Boards. Send us your specifications to figure.

We make a plain meter panel with sectional bus bar connected together with wire from meter, and is reasonable in price.

We also make patented Meter Control Panel Boards with separate meter bar for the number of tenant meters desired; with these panels changes can be made in tenant circuits from one meter to another without wire connections.

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Underwriters'Laboratories,Inc.
INSPECTED

ELECTRIC CABINET
ISSUE B.1





Our Stan dard Gutter Cabinet Boxes are all made from one piece of sheet steel, flanged or lapped at the four

corners and riveted, with a ¾-inch flange turned inwardly all around outside edge. This flange materially adds to the rigidity of the construction and is used in connection with the ② Universal Clamp for fastening the front to the box of the cabinet.

#### Thickness

We make and list two thicknesses of Steel Cabinet Boxes.

Type 140, Standard Code Thickness, made of No. 14 U.S. gauge for all boxes of 1200 square inches, or less, in area, and under 49 inches in height, and No. 10 for boxes over these sizes.

We can also make one piece boxes of No. 8 U. S. gauge ( $\frac{1}{18}$ -inch) steel at additional price.

#### Gutter Space



Our Standard Gutter Cabinet Boxes are all listed and made with gutter space all around panel varying with height of panel either 3-inch or 4-inch wide.

#### Frame or Barrier

Slate and marble barriers are separately listed and are not included in either price of panel, box or front. Barriers are always furnished with four patented adjustable corner supports.

Note:—1915 Code standard rules specify that all cutout boxes and cabinets having more than 4 circuit branches shall be provided with barriers (partitions) for separating wiring gutter space from the cutouts, switches, panel boards and other apparatus, unless the wires leave the cabinet directly opposite their terminal connections.

#### Depth

Our Standard Gutter Cabinet Boxes are all made with at least one-quarter inch space back of panel and at least half-inch clear space between door and any current carrying part of panel, we can increase this depth to take care of specified conditions of installation at an additional price.

#### Flush or Surface

Our Standard Gutter Cabinet Boxes are made with turned-in flange, and can be used for both flush and surface installation.

#### Holes

Our Standard Gutter Cabinet Boxes are punched with all necessary "cleared" holes for both feeder and circuit cables and wires; provided template for holes is sent with order. No allowance made for holes when not punched. We can save you money by punching holes for you. Write us for template sheets to lay out holes for each box.

PLEASE NOTE:—When template for holes does not accompany order, our standard practice is (unless order says no holes) to provide in top of cabinet box knockout holes for ½-inch conduit equal to the total number of circuit branches on the panel, and in the bottom for 20 per cent of this amount.

In addition to the above, knockout holes not exceeding 2-inch conduit size are provided for the mains in both the top and bottom of cabinet box, the size and number depending upon their capacity and whether same are 2 or 3-wire.

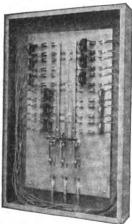
If width of cabinet box will not accommodate the required number of holes in the top, the excess number are placed in the sides.

PLUG—We make an extra charge of 10 per cent for boxes ordered with holes made knock-out, according to a hole template.

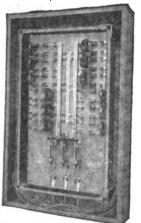
Note:—We believe knock-out holes are an unnecessary expense to the contractor, because we will furnish, on demand, plugs free; not exceeding 20 per cent of the number of ½ and ¾ holes specified for entire order, and these plugs can be placed in just the holes not used for conduit.



Steel Box



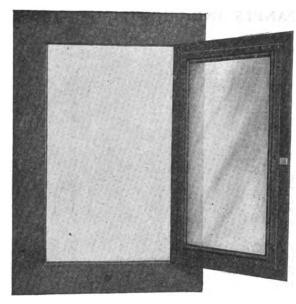
This cut shows how Panel can be connected before Barriers are installed.

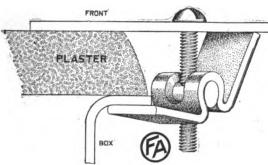


This cut fliustrates Barriers in Position after all wires are connected.

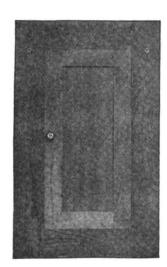
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Patent No. 1062075, May 20, 1913 UNIVERSAL CLAMP



Wood Panel. Type 1-P-6.

# STANDARD FRONTS FOR GUTTER CABINETS

(b) standard fronts are made in steel (types 2-P-6 and 2-G-6) and wood (types 1-P-6 and 1-G-6) as follows:

Fastening

Both steel and wood fronts are fitted with Universal clamps, which are self-adjusting to variation in thickness of plaster not to exceed %-inch, and hold the front securely and eliminate the trouble of locating the old-time threaded hole in flange of box.

Flush or Surface

All fronts for cabinet boxes set in wall flush with finished plaster are made 3/4-inch larger than box, and all fronts for cabinet boxes set on wall are made same size as outside of box.

The flush type front will always be furnished unless the customer specifies that surface type is desired.

Catch and Lock

Both steel and wood fronts with doors less than 39 inches high are equipped with @ combination spring catch Yale lock, and when door is over 38 inches high or for double doors, they are equipped with shoot bolts, vault handles and Yale lock.

#### STEEL CONSTRUCTION

Types 2-P-6 and 2-G-6

Steel fronts are made from a single sheet of steel, either No. 12 U. S. gauge for small size or No. 10 for large size. The door is cut out, leaving a trim (mat) of the proper width all around the door. There are no joints or patching at the corners. A strip of band iron is spot-welded along the inner edge of the trim in such a manner as to project out and form a 14-inch rabbet for the door to close against. Glass Panel

When glass panel in door is specified (type 2-G-6), the door is again cut out and proper size Code thickness glass panel fastened by steel moulding on inside of door(seecut). When specified, plate glass for small sizes or beveled edge glass for any size will be furnished at an additional price.

Finish

Standard steel fronts are finished in dead black paint. When specified, white or black baked enamel finish will be furnished at an additional price.

#### WOOD CONSTRUCTION

Types 1-P-6 and 1-G-6

Standard wood fronts are made of 1/8-inch straight-sawed oak, yellow pine or cypress wood, fitted with hinges and finished in natural color with one coat of filler and two coats of varnish.

Glass Panel

Wood fronts with glass panel door (type 1-G-6) will be furnished with Code thickness glass panel. When specified, plate glass for small sizes or beveled edge glass for any size will be furnished at an additional price.

All wood fronts are regularly furnished with No. 16 U. S. gauge steel lining over entire back of trim and door.

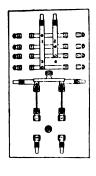
Special Fronts

Fronts of special design, wood or finish will be furnished as per specifications submitted at an additional price.

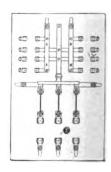
# SPECIALS FOR ( PANELS AND FRONTS

#### Meter Loop Connections

List prices and heights to be added to list price and height of any type of standard slate panel board equipped with main knife switch with fuse connections.



ADD TO HEIGHT OF PANEL	STANDARD CAPACITY OF MAINS	ADD TO	2-Wire	3-WIRE AND 3-2-WIRE CON- VERTIBLE
	!	(Panels and Barriers only	\$2.20	\$2.30
1 Inch	30A	Comb. 2-P-6 Front	2.60	2.80
		Comb. 1-P-6 Front	2.80	2.90
		Panels and Barriers only	2.40	2.50
2 Inches	60A	Comb. 2-P-6 Front	2.90	3.10
	1	Comb. 1-P-6 Front	3.20	3.20
	1 1	Panels and Barriers only	2.80	2.90
2 Inches	100A	Comb. 2-P-6 Front	3.40	3.70
	1	Comb. 1-P-6 Front	3.60	4.00
		Panels and Barriers only	3.50	3.60
3 Inches	200A	Comb. 2-P-6 Front	5.20	5.50
		Comb. 1-P-6 Front	6.10	6.60
		Panels and Barriers only	8.10	10.40
4 Inches	400A	Comb. 2-P-6 Front	8.90	11.20
	1	Comb. 1-P-6 Front	10.00	12.30



Note-Minimum Width of Panel for 400 Ampere, Meter Loop

11 Inches 15 Inches

#### METER SPACE ON FRONTS

#### Wood Fronts

We can make any type of wood front with 12 inches of additional height of trim or frame and fitted with porcelain bushings of size as ordered for meter loops, as per cut.

#### Steel Fronts

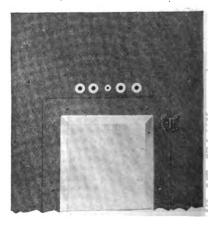
We can make any type of steel front with 12 inches of additional height of trim or frame and fitted with Federal porcelain bushings of size as ordered for meter loops.

Unless otherwise specified we will furnish the following FEDERAL bushings with our fronts.

1A Shunt Connection 2A 30 Ampere Mains 3A 60 Ampere Mains 4A 100 Ampere Mains 5A 200 Ampere Mains 6A 400 Ampere Mains



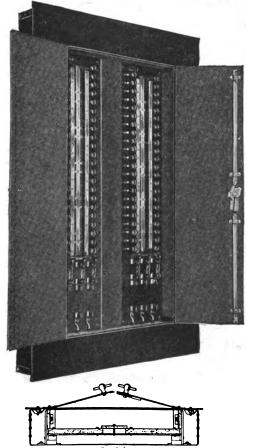
FOR PANELS	ADD TO LIST PRICE OF				
WITH BUS BAR,	STANDARD FRONTS				
CAPACITY OF	2-Wire	3-Wire			
30 and 60A	\$3.85	\$4.50			
100 and 200A	4.50	5.40			



FOR PANBLE WITH BUS BAR,	ADD TO LIST PRICE OF STANDARD FRONTS				
· CAPACITY OF	2-Wire	3-Wire			
30 and 60A 100 and 200A	G\$3.25 4.00 4.50	\$3.70 4.85 5.30			

Matau hoard 10w10w1/ oak mood finished Tiet \$1.75

# MULTIPLE PANEL GUTTER CABINETS



# SEPARATE COMPARTMENT CABINET

When the specifications demand a separate compartment and door for each panel board where there are more than one panel in a cabinet, we make these same as shown in cut excepting that the space between the panels is furnished with barriers the same as the other sides of the cabinet. The front is carried down between the doors so that there is no open space between one panel compartment and any of the others, making in fact one solid front for the cabinet.

# DOUBLE DOOR CABINET

Our standard practice with distributing centers requiring branches that would make one panel over 78 inches high is to divide the branches upon two panels, each with the same capacity feeder connections, and the two panels arranged with a gutter space at the top, bottom and both sides of the cabinet the same width as that called for in a single panel cabinet of the same height and the space between the two panels of the same width as the gutter space. (See cut.)

We also increase the depth of the cabinet box to make one-inch space in rear of panel with 3-inch gutter,  $1\frac{1}{2}$  for  $3\frac{1}{2}$  gutter and 2-inch for 4-inch gutter, so that the circuit wires can be distributed behind the panel board from the

top, bottom and side gutters to the space between the panels. (See cut.)

The panel boards are grooved at the center space just the same as for the gutter, and a half-inch  $(\frac{1}{2})$  piece of slate is then placed over the space and covers as much of the panel at the center as the barriers do on the gutter side.

The double panel fronts are made in all the Ø types, and when width of panel exceeds



Deep Cabinet

24 inches, we will make all fronts with double doors which are equipped with vault handles, shoot bolts and Yale lock.

# (A) CABINETS

With Rear Wiring Space
We have a standard design
of rear wire space cabinets
made according to size or as
specified of No. 14 or No. 10
gauge sheet steel, flanged and
securely riveted together at
corners and reinforced at front
edge with angle iron that forms
a rabbet and trim for the door
which is fitted with hinges
spaced not over 24 inches
apart, vault handles and shoot
bolts and Yale lock. We also
make this cabinet with side
doors, giving access to rear



Side Door Cabinet

# ® SAFETY CABINET ®

(FOOL PROOF)

The Safety Cabinet, Fool Proof, consists of a standard combination panel board and cabinet with the addition of an inside door to a compartment in which are located the main knife switch and all fuse connections with an extension, or cover on both sides of door over push button, switches and connections.

These covers are so located that the fronts of the switches just project and the switches can be operated by opening the main door, as shown in cut.

Main door is provided with an **②** combination spring catch Yale lock.

The inner door is equipped with a Yale lock operated with a different key than that used for the main door.

#### STANDARD FRONT

FASTENED WITH WUNIVERSAL CLAMPS.
SAVES TIME IN INSTALLING

#### STANDARD PLUG FUSE TYPE PANEL

WITH PUSH BUTTON SWITCHES

# FACE OF SWITCH-COVERS ONLY EXPOSED

NO CHANCE OF COMING IN CONTACT WITH SOME LIVE METAL PART

# INSIDE DOOR (Separate Lock)

AFFORDS ACCESS TO MAIN KNIFE SWITCH
AND ALL FUSE CONNECTIONS

# UNDERWRITERS' LABEL SERVICE

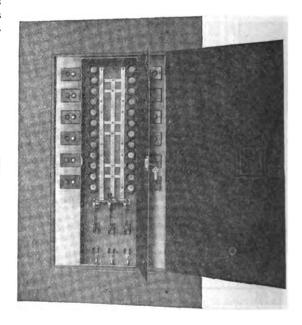
If desired, we can furnish in place of the above, Safety Type cabinets having two doors in one trim (front).

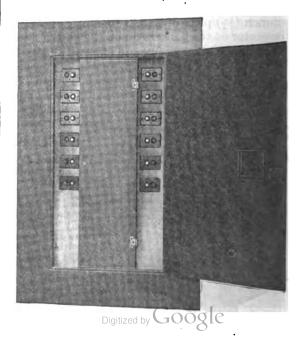
The inner door exposes branch switches only. The main door exposes entire panel.

On this type panel, we can supply either New Code or Edison plug fuse connections on the branch switches.

The branch switches are between the bus bar and the fuses, making the fuses dead when switches are open.

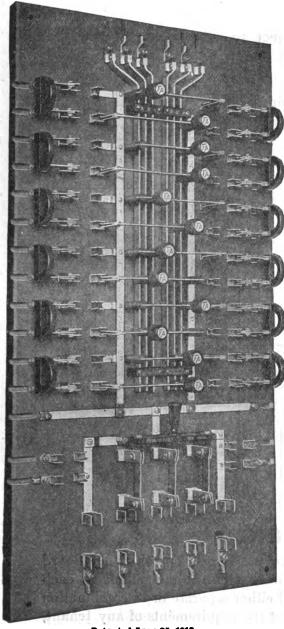
# Prices Sent on Request— Send Us Your Specifications





# METER CONTROL PANEL BOARDS AND CABINETS

METER CONTROL PANEL BOARDS should be installed wherever tenant's space is liable to be increased or decreased on demand of the tenants in office, store and warehouse buildings.



Patented June 25, 1912 No. 1,030,798 Other patents pending

We are equipped to make up the Meter Control Panel Boards and the Cabinets as per the special requirements for the individual building, as specified by the architect or the engineer.

#### **PANEL**

We manufacture several types of Meter Control Panel Boards to cover the specifications of our customers.

On this page we show a cut of our 
 Meter Control Panel Board, one of the most complete and yet most simple Meter Control Panels on the market. This panel is the most desirable for a building, from the fact that after the connections are made between the Meter Fuses, Meters and Meter Bars, changes can be made in the connection of the tenants' circuits, by means of our 
 "Bus Bar Connecting Device", to correspond with the requirements of the tenants for more or less space.

These changes can be made by the engineer or janitor without calling in a special mechanic or changing the wiring.

The cheap makeshift Meter Panel Boards require wire connections, and considerable expense to make changes in the tenant's circuits to the proper meter.

#### **CABINETS**

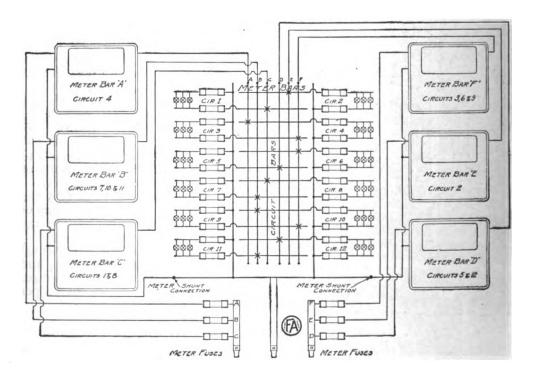
We make a number of designs of cabinets for Meter Control Panels. Some of these enclose, under lock and key, the Meter Control Panel only, with separate compartments for the public light panel. Some designs are made with gutters surrounding panel; some with wire space back of panel and some designs with separate compartments for Meter Control Panel, Public Light Panel and for enclosing Meters.

# DIAGRAM OF CONNECTIONS

FOR A TWELVE-TENANT CIRCUIT, SIX-METER FUSE AND SIX-METER BAR, ME-TER CONTROL PANEL BOARD INSTAL-LATION, SHOWING TWO-WIRE METERS

For Three-Wire Meters Connect to One-Meter Fuse and One-Meter Bar on Both Sides of Panel With Shunt Connection.

NOTE—At all points of crossing of the meter bars and circuit bars connection can be readily made with a special connector according to the type of Meter-Control Panel Boards specified.

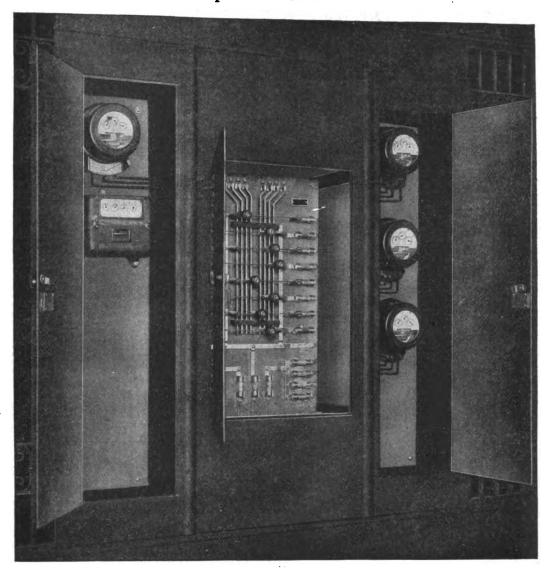


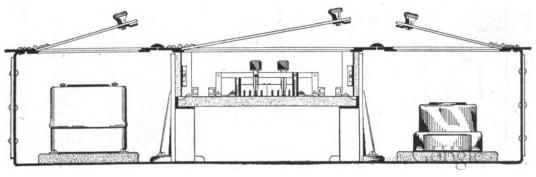
# **WIRING**

The proper circuit wiring for a Meter-Control Panel Board installation is to provide for a separate circuit to the outlets in each section of space that can be rented either separate or in combination with other sections or space to meet the requirements of any tenant, in an office, store or warehouse building.

# METER CONTROL PANEL AND CABINET

Having one compartment for Meter Control Panel and separate compartments for Meters





Capacity 6 Amp. Per Branch

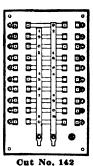
125 V. Branches

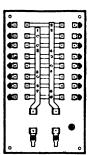


Base Finish Branches **Fronts** 

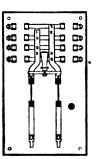
PANEL BOARDS. Type 1—2-Wire Mains
Black slate, ciled finish, ¼ inch thick.
Main and branch bus bars polished and Isequered.
Double Pole New Code enclosed fuse connections.
2-P-6 Dead Black Paint Finish.
1-P-6 Unfinished straight sawed oak.

		_	1-P-6 Unf	inished stra	ight sawed	oak.			
BRANC		e of nel	Catalog Number,	List	Prices	Panel-Ba		Code Ga Boxes	
Ĉ H			Panel Only	Panel	Barriers		2-P-6 d Front		od Front
E 8	Wide	High	Only	Only	Only	Cat. No.	List Price	Cat. No.	List Price
	<u> </u>			Main	Cable Lug	ra Only	·	<u> </u>	<u> </u>
2	10	6	14707	\$ 4.10	\$ 2.80	142023	\$17.60	143021	\$22.10
4	10 10	9 12	14204 142 <b>06</b>	6.30 8.40	3.00 3.20	142043 142063	20.40 23.10	143041 143061	25.00 27.80
8	10	15	14208	10.30	3.60	142082	26.20 28.70	142081 142101	31.20 33.80
10 13	10 10	17 20	1421 <b>0</b> 14212	12.30 14.90	3.80 4.00	1421 <b>03</b> 142122	32.00	143131	37.20
14	10	22	14214	17.20	4.20 4.40	143143 1431 <b>63</b>	34.80 37.70	143141 143161	40.10 43.10
1 <b>6</b> 18	10 10	24 28	1421 <b>6</b> 14218	19.50 22.90	4.80	142182	42.40	142181	48.00
20	10	30 33	14220 14233	25.00 27.10	5.00 5.30	142202 142222	45.10 48.20	142201 142221	50.80 54.10
32 34	10 10	35	14224	29.50	5.50	143343	51.30	142241	57.20 60.00
26 28	10 10	38 40	142 <b>26</b> 142 <b>2</b> 8	31.70 33.80	5.70 5.90	142363 143283	54.20 60.10	142261 142281	62.90
30	10	· 43	14230	35.80	6.20	142302 142322	66.10 69.20	142 <b>30</b> 1 142 <b>32</b> 1	69.20 72.40
32 34	10 12	45 49	14232 14284	38.10 56.30	6.40 7.00	142342	91.10	143341	95.30
					Fuse Conn				
2	10	9	15202	\$ 5.60	\$ 3.00	152023	\$19.70	152021	\$24.30
4	10	11	15204	7.80	3.20	152642	22.50 26.10	153041	27.20 31.10
<b>6</b> 8	10 10	16 18	152 <b>06</b> 152 <b>0</b> 8	10.20 12.10	3.60 3.80	152062 152083	28.50	1 <b>520</b> 61 1 <b>526</b> 81	33.60
10	10	21	15310	14.10	4.20	153103	31.70	153101	37.00 41.90
12 14	10 10	26 29	15212 15214	17.60 19.90	4.60 5.00	152123 152142	36.40 40.00	152121 152141	45.70
16	10	31	15216	22.20	5.10	153163	42.80	153161	48.60 54.90
18 20	10 10	36 39	15218 15220	27.20 29.30	5.50 5.90	152182 1522 <b>6</b> 3	49.00 55.60	152181 152201	58.40
23	10	41	15222	31.40	6.00	152222 152242	60.90 64.10	153321 152341	63.90 67.20
24 26	10 10	44 46	15224 1522 <b>6</b>	33.80 36.00	6.40	152262	64.10 67.10	152261	70.30
28 30	10 10	48 51	15238 15230	38.10 40.10	6.60 7.00	152282 152 <b>30</b> 2	70.00 73.60	152381 152301	73 . 40 77 . 60
33	iŏ	53	15232	42.40	7.20	153323	76.60	152331	81.00
34	12	61	15234	66.20	8.80	159343	107.90	152341	114.50
					Inife Swit		*00 FO	162021	\$27.10
3	10 10	10 12	16202 16204	\$ 8.40 10.60	\$ 3.00 3.20	162023 162 <b>04</b> 3	\$22.50 25.30	162041	30.10
•	10	18	16206	13.60	3.80	162063	30.00 32.60	162061 162031	35 . 10 37 . 80
8 10	10 10	20 23	16208 1 <b>62</b> 10	15.50 17.50	4.00 4.40	162082 162102	35.70	163101	41.10
13	10	28	16213	22.90	4.80	162132	42.40	162121 162141	48.00 51.60
14 16	10 10	31 33	16214 16216	25.20 27.50	5.10 5.30	162143 1621 <b>62</b>	45.80 48.60	163161	54.50
18	10	40.	16218	34.10	7.70	162183	63.30	162181	66.10 72.20
20 23	10 10	42 45	16220 16222	36.20 38.30	7.80 8.30	162203 162333	69.20 73.20	1 <b>6320</b> 1 16 <b>322</b> 1	76.40
24	10	47	16224	40.70	8.60 8.80	162242 162262	76.50 79.60	162241 162361	79.90 83.20
26 28	10 10	50 52	1 <b>6226</b> 16228	42.90 45.00	9.10	162283	<b>82.70</b>	163381	86.70 91.20
30 32	10 10	55 57	16230 16232	47.00 49.30	9.60 9.90	162303 162323	86.30 89.40	16 <b>230</b> 1 1 <b>6233</b> 1	94.80
34	12	65	16234	75.50	13.80	162343	128.10	163341	135.80
			Main I	Knife Swi	tch with F	ruse Conn	ections		
2	10	11	17202	\$ 9.80	\$3.20	172 <b>022</b> 172 <b>042</b>	\$24.50 27.30	172021 172041	\$29.20 32.20
4	10 10	13 18	17204 17206	12.00 15.00	3.40 3.80	172063	31.40	172061	36.50
8	10	21	17208	16.90	4.20	177087	34.50 37.10	172081 172101	39.80 42.50
10 13	10 10	23 30	17210 17313	18.90 26.10	4.40 5.00	172102 172122	46.20	173121	51.90
14	10	32	17214	28.40	5.10	172142 172163	49.00 52.50	172141 172161	54.80 58.40
16	10 10	35 41	17216 17218	30.70 38.60	5.50 7.80	173183	71.60	173181	74.60
18 20	10	44	17220	40.70	8.10	172202	74.70 77.70	173301 173331	77.80 80.90
22 24	10 10	46 49	17 <b>333</b> 17 <b>334</b>	42.80 45.20	8.30 8.80	172223 172242	81.90	173341	85.50
26	10	51	17236 17238	47.40	9.10 9.40	172202 172282	85.10 88.00	17 <b>336</b> 1 17 <b>33</b> 81	89.10 92.40
28 30	10 10	54 56	17230	49.50 51.50	9.60	172307	90.80 93.90	172301 172231	95.70 99.30
32	10	58 67	17232 17234	53.80 86.20	9.90 14.10	172888 178848	139.90	172341	148.10
34	12	- 0/	1/432	00.20		anamalai i			

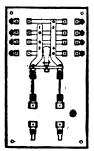




Cut No. 152



Cut No. 163



Cut No. 172

Add 5% to panels and barriers only for black enameled slate.
Add 25% to panels only for marble.

Dignized by

Add 100% to barriers only for marble.

Capacity 3 Amp. Per Branch

125 V. Branches



### PANEL BOARDS. Type 1-3-Wire Mains

Base Finish Branches Fronts

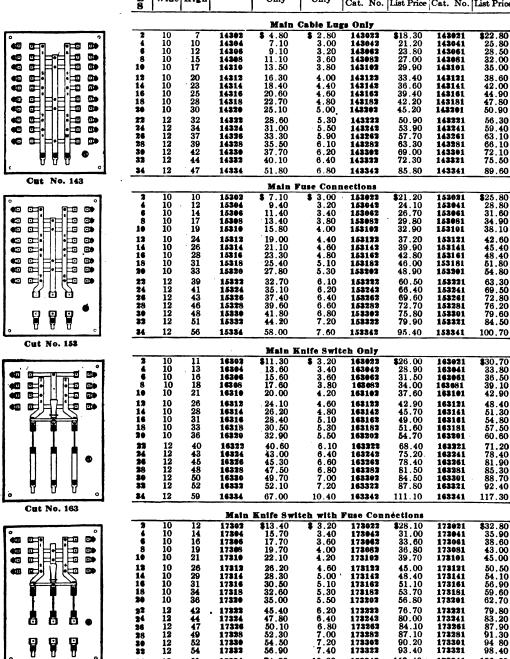
Black slate, oiled finish, ½ inch thick.
Main and branch bus bars polished and lacquered.
Double Pole New Code enclosed fuse connection.
2-P-6 Dead Black Paint Finish.
1-P-6 Unfinished straight saved oak.

BMANCHES	Size of Panel	Catalog Number,	List Prices		Combination List Prices of Panel-Barriers and Code Gauge Steel Gutter Boxes					
		Panel Only	Panel Only	Barriers Only	With 2-P-6 All Steel Front			With 1-P-6 All Wood Front		
	Wide High				Cat.	No.	List Price	Cat.	No.	List Price
			Main	Cable Lu	rs On	y				

	Main Cable Lugs Only										
2	10	7	14303	\$ 4.80	\$ 2.80	143022	\$18.30	143021	\$22.80		
4	10	10	14304	7.10	3.00	143042	21.20	143641	25.80		
6	10	12	14306	9.10	3.20	143062	23.80	143061	28.50		
8	10	15	14308	11.10	3.60	143082	27.00	143081	32.00		
10	10	17	14316	13.50	3.80	143103	29.90	143101	35.00		
12	10	20	14313	16.30	4.00	143123	33.40	143131	38.60		
14	10	23	14314	18.40	4.40	143148	36.60	143141	42.00		
16	10	25	14316	20.60	4.60	143163	39.40	143161	44.90		
18	10	28	14318	22.70	4.80	143182	42.20	143181	47.80		
20	10	30	14320	25.10	5.00	143303	45.20	143701	50.90		
22	12	32	14322	28.60	5.30	143222	50.90	148221	56.30		
24	12	34	14324	31.00	5.50	143242	53.90	143241	59.40		
26	12	37	14326	33.30	5.90	143263	57.70	143261	63.10		
28	12	39	14328	35.50	6.10	143282	63.30	143281	66.10		
30	12	42	14330	37.70	6.20	142302	69.00	143301	72.10		
32	12	44	14333	40.10	6.40	143322	72.30	143321	75.50		
34	12	47	14334	51.80	6.80	143342	85.80	143341	89.60		

	Main Knife Switch Only											
3	10	11	16307	\$11.30	\$ 3.20	163022	\$26.00	163021	\$30.70			
- 4	10	. 13	16304	13.60	3.40	163042	28.90	163041	33.80			
•	10	16	16306	15.60	3.60	163062	31.50	163061	36.50			
8	10	18	16308	17.60	3.80	163082	34.00	163081	39.10			
10	10	21	16310	20.00	4.20	163103	37.60	163101	42.90			
13	10	26	16312	24.10	4.60	163122	42.90	163121	48.40			
14	10	28	16314	26.20	4.80	163142	45.70	163141	51.30			
16	10	31	16316	28.40	5.10	163162	49.00	163161	54.80			
18	10	33	16318	30.50	5.30	163182	51.60	163181	57.50			
<b>20</b>	10	36	16320	32.90	5.50	163202	54.70	163201	60.60			
22	12	40	16323	40.60	6.10	163322	68.40	163321	71.20			
24	12	43	16324	43.00	6.40	163242	75.20	163241	78.40			
26	12	45	16326	45.30	6.60	163262	78.40	163261	81.90			
28	12	48	16328	47.50	6.80	163282	81.50	163281	85.30			
30	12	<b>5</b> 0	16330	49.70	7.00	163302	84.50	163301	88.70			
33	îã	52	16332	52.10	7.20	163322	87.80	163321	92.40			
34	12	59	16334	67.00	10.40	163342	111.10	163341	117.30			

	-14	38	10002	07.00	10.40	103044	111.10	109941	117.30
			Main	Knife Swi	tch with	Fuse Con	néctions		
2	10	12	17303	\$13.40	\$ 3.20	173022	\$28.10	173021	\$32.80
4	10	14	17304	15.70	3.40	173042	31.00	173041	35.90
•	10	16	17306	17.70	3.60	173062	33.60	173061	38.60
8	10	19	17306	19.70	4.00	173083	36.80	173081	43.00
10	10	21	17310	22.10	4.20	173107	39.70	173101	45.00
13	10	26	17313	26.20	4.60	173122	45.00	173121	50.50
14	10	29	17314	28.30	5.00 '	173143	48.40	173141	54.10
16	10	31	17316	30.50	5.10	173162	51.10	173161	56.90
18	10	34	17318	32.60	5.30	173182	53.70	173181	59.60
20	10	36	17330	35.00	5.50	173203	<b>5</b> 6.80	173201	62.70
22	12	42	. 17322	45.40	6.20	173223	76.70	173221	79.80
24	12	44	17324	47.80	6.40	173243	80.00	173241	83.20
26	12	47	17326	50.10	6.80	173262	84.10	173261	87.90
28	12	49	17328	52.30	7.00	173282	87.10	173281	91.30
30	12	52	17830	54.50	7.20	173362	90.20	173301	94 80
32	12	54	17833	56.90	7.40	173322	93.40	173321	98.40
34	12	61	17884	74.30	10.80	173342	119.40	173341	126.00



Cut No. 178

Add 5% to panels and barriers only for black enameled slate.
Add 25% to panels only for marble.
Add 196% to barriers only for marble.

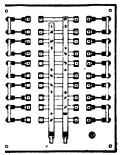
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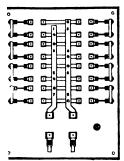
25 V. Mains

Lapacity 6 Amp. Per Branch

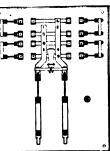
25 V. Branches



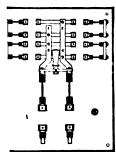
Cut No. 242



Cut No. 252



Cut No. 262



Cut No. 273

# (FA) PANEL BOARDS. Type 2—2-Wire Mains

Base Finish Branches Fronts

Black slate, oiled finish, 1/2 inch thick.

Main and branch bus bars polished and lacquered
30 Amp. D. P. Knife Switches with D. P. N. C. enclosed fuse connections.
2-P-6 Dead Black Paint Finish.
1-P-6 Unfinished straight sawed oak.

B R A	Size of Panel	Catalog Number.	List P	rices	Combination List Prices o Panel-Barriers and Code Gauge Gutter Boxes						
N C H		Panel Only	Panel	Barriers	With All Stee		With All Woo				
H E S	Wide High	h om	Only	Only	Cat. No.	List Price	Cat. No.	List Price			

				Main	Cable Lus	s Only			_
3	14 14	6 9	24202 24204	\$ 5.40 8.40	\$ 3.10 3.30	242022 242042	\$20.40 24.10	242021 242041	\$24.80 28.60
6 8 10	14 14 14	13 16 18	24206 24208 24210	11.40 14.40 17.30	3.70 3.90 4.10	24 <b>206</b> 2 24 <b>20</b> 82 242102	28.50 32.10 35.60	342061 342081 342101	33.20 36.90 40.50
13 14 16	14 14 14	21 24 26	34313 34314 24316	20.80 24.20 27.50	4.50 4.70 4.90	242122 242142 242163	40.40 44.50 48.50	343131 343141 342161	45.40 49.60 53.80
18 20	14 14 14	30 33 36	34318 34220 24222	31.90 35.00 38.00	5.30 5.60 5.80	242183 242203 242223	54.40 58.80 62.50	242181 342201 242221	59.80 64.30 68.00
27 24 26	14 14 14	38 41 44	24224 24226 24228	41.40 44.50 47.60	6.00 6.30 6.50	242343 243263 242283	66.70 76.70 80.90	342341 243361 243281	72.10 80.00 84.30
36 30 33	14 14	46 <b>49</b>	24230 24232	50.50 53.80	6.70 7.10	242303 242323	84.60 89.60	242301 242321	88.40 94.10
84	16	53	24234	73.10 Main 1	7.70 Fuse Conn		112.40	242341	117.80
3	14	.9	25202	\$ 6.90	\$ 3.30	252022	\$22.60	252021 252041	\$27.10 30.90

84	16	53	24234	73.10	7.70	242842	112.40	244341	117.80
				Main F	use Conn	ections			
3	14	.9	25202	\$ 6.90 9.90	\$ 3.30 3.50	252022 252042	\$22.60 26.30	252021 252041	\$27.10 30.90
4	14 14	12 16	25204 25206	13.20	3.90	253062	30.90	252061	35.70
8 10	14 14	19 22	25208 25210	16.20 19.10	4.30 4.50	252082 252102	35.20 38.70	252081 252101	40.20 43.70
13	14	28	35313	23.50	5.10	252122	45.20	252121 252141	50.60 55 50
14 16	14 14	31 33	25214 2521 <b>6</b>	26.90 30.20	5.40 5.60	252142 25 <b>3163</b>	50.00 54.00	252161	59.50
18	14	38	25218	36.20 39.30	6.00 6.30	252182 252202	61.50 71.50	253181 252301	66.90 74.80
36 37	14 14	41 44	25220 25222	42.30	6.50	252223	75.60 79.80	252221 252241	79.00 83.60
24 26	14 14	46 49	25234 25236	45.70 48.80	6.70 7.10	252242 252262	84.60	253361	89.10
38 30	14 14	52 55	25228 25230	51.90 54.80	7.30 7.70	252382 252302	88.60 93.40	252281 252301	93.50 98.90
32	14	57	25232	58.10	7.90	252322	97.60	252321	103.60 137.90
84	16	65	25234	83.00	9.80	252343	129.90	252341	137.90

				Main Knif	e Switch	Only			
3	14	10	26202	\$ 9.70	\$ 3.30	362022	\$25.40	263021	\$29.90
	14	13	26204	12.70	3.70	262042	29.80	263041	34.50
6	14	19	26206	16.60	4.30	262062	35.60	262061	40.60
	14	21	26208	19.60	4.50	262082	39.20	262081	44.20
10	14	24	36210	22.50	4.70 5.30	262102 262122	42.80 51.30	262101 262131	47.90 56.70
13 14 16	14 14 14	30 32 35	26313 26314 26316	28.80 32.20 35.50	5.40 5.80	262142 263163	55.30 60.00	263141 263161	60.80 65.50
18	14	42	26218	43.10	8.20	363182	79.30	262181	82.60
20	14	45	26220	46.20	8.70	262203	84.50	262201	88.30
22	14	48	36222	49.20	9.00	363222	88.60	363231	92.70
24	14	50	26324	52.60	9.20	362342	92.90	363241	97.40
26. 88	14 14	53 56	26226 26228	55.70 58.80	9.80 10.00	362362 362382	98.10 102.30	262201 262281 262201	103.20 107.80 112.20
30	14	58	36230	61.70	10.30	262392	106.20	363331	118.60
32	14	61	36232	65.00	10.80	262322	111.90	263341	160.50
34	16	69	26234	<b>92.30</b>	14.90	262343	151.40	204941	100.50

			Main	Knife Swit	ch with	Fuse Con	nections		
2	14	11	27202	\$11.10	\$3.50	272022	\$27.50	272021	\$32.10
ã	14	14	27204	14.10	3.70	372043	31.20	272041	35.90
6	14	19	27206	18.00	4.30	372062	37.00	372061	42.00
8	14	22	27205	21.00	4.50	272082	40.60	<b>2720</b> 81	45.60
10	14	24	27210	23.90	4.70	272102	44.20	272101	49.30
12	14	31	27212	32.00	5.40	272123	55.10	372131	60.60
14	14	34	27214	35.40	5.60	273142	59.20	373141	64.70
16	14	37	27316	38.70	6.00	273163	64.00	272161	69 . <b>40</b>
18	14	44	27218	47.60	8.50	272182	85.00	272181	88.40
			27220	50.70	8.70	272202	89.00	273201	92.80
20	14	46	27222	53.70	9.20	272322	93.90	272221	98.40
22	14	49			9.50	272242	98.40	272241	103.30
24	14	51	27234	57.10		272363	102.60	272261	107.70
26	14	54	27226	60.20	9.80			272381	113.80
28	14	57	27238	<b>63.30</b>	10.30	273283	107.80		118.10
30	14	60	27230	66.20	10.50	272802	111.80	272301	
32	14	62	27233	69.50	10.80	272322	116.30	272321	123.10
34	16	71	27284	103.00	15.20	272343	163.40	272341	173.00

Add 5% to panels and barriers only for black enameled slate.
Add 35% to panels only for marble.
Add 100% to barriers only for marble.

Capacity 3 Amp.

### PANEL BOARDS. Type 2-3-Wire Mains

Base Finish

Black slate, oiled finish, 1/2 inch thick.
Main and branch bus bars polished and lacquered.
30 Amp. D. P. Knife Switches with D. P. N. C. enclosed fuse connections.
2-P-6 Dead Black Paint Finish.
1-P-6 Unfinished straight sawed oak. Branches

Fronts

Per Branch										
Fer Branch	B ANCHES		e of nel	Catalog Number,	List l	Prices	Panel-Ba		List Price Code Ga Boxes	a of uge Steel
125 V. Branches	Ë			Panel Only	Panel	Barriers		2-P-6 el Front		1-P-6 d Front
	S	Wide	High		Only	Only	Cat. No.	List Price	Cat. No.	List Price
					Main	Cable Lu	s Only			
0	2	14	.8	24302	\$ 6.00	\$ 3.10 3.30 3.70	248022	\$21.00	243021	\$25.40
	4	14 14	10 13	24304 243 <b>06</b>	9.30 12.30	3.30	243042 243062	25.00 29.40	343041 343001	29.50 34.10
	8	14	16	24308	15.30	3.90	743087	33.00	<b>3430</b> 81	37.80
	10	14	18	24810	18.40	4.10	243102	36.70	343101	41.60
	12 14	14 14	22 25	34312 24314	22.10 25.30	4.50 4.90	343133 343143	41.70 46.30	243121 243141	46.70 51.60
	16	14	25 27	24816	28.30	5.10	243163	50.00	243161	55.40
	18 <b>20</b>	14 14	30 33	24318 24320	31.40 34.80	5.30 5.60	243182 243202	53.90 58.60	343181 343301	59.30 64.10
	22	16	35	24323	39.20	6.00	248222	64.80	243221	70.20
(p-45 Ct +   + 5 Cp - 4)	24 26	16 16	37 40	24374 24326	42.70 45.90	6.10 6.30	243242 243262	68.90 75.20	343241 243261	74.30 78.40
	28	16	43	24328	49.10	6.70	243282	83.50	<b>3433</b> 81	87.30
1 - 1111111 - 1	30 32	16 16	45 48	243 <b>30</b> 24332	52.20 55.70	6.90 7.10	243302 243322	87.60 92.10	243301 243321	91.70 96.50
	34	16	52	24334	68.50	7.50	243342	106.80	343841	111.80
Cut No. 243										
	2	14	10	25292	\$ 8.30	\$ 3.30	253022	\$24.00	253021	\$28.50
	4	14	12	25304	11.60	3.50	358043	28.00	253041	32.60
	<b>6</b> 8	14 14	15 18	253 <b>9</b> 6 <b>2539</b> 8	14.60 17.60	3.90 4.10	253062 253082	32.30 35.90	253061 253081	37.10 40.80
	10	14	21	25810	20.70	4.50	253102	40.30	353101	45.30
	13	14	25	25312	24.80	4.90	353123 353142	45.80	353131	51.10
	14 16	14 14	28 30	25314 <b>253</b> 16	28.00 31.00	5.10 5.30	253162	49.70 53.50	353141 353161	55.10 58.90
	18 20	14 14	33 36	35318 35320	34.10 37.50	5.60 5.80	753187 753702	57.90 62.00	353181 353301	63 . 40 67 . 50
	22	16	41	25322	43.30	6.50	353332	78.70	253221	80.20
	24	16	44	25324	46.80	6.70	253242	81.20	353341	85.00
	26 28	16 16	47 49	25326 25328	50.00 53.20	7.10 7.30	253262 253282	86.40 90.50	353261 353781	90.80 95.20
	30	16	52	25330	56.30	7.50	253302	94.60	253301	99.60
	32 34	16 16	55 60	25332 25334	59.80 74.60	7.90 8.30	253322 253342	100.10 116.70	253321 253341	105.80 123.10
Cut No. 253										
	3	14	11	26302	\$12.50	\$ 3.50	263022	\$28.90	263021	\$33.50
	4	14	14 17	26304	15.80	3.70	263042	32.90	263041	37.60
	<b>6</b> 8	14 14	17 19	263 <b>06</b> 26308	18.80 21.80	4.10 4.30	263067 263087	37.10 40.80	<b>263061</b> <b>263081</b>	42.00 45.80
	10	14	22	26310	24.90	4.50	363103	44.50	363101	49.50
	12	14	27 30	26312 26314	29.70 33.10	5.10 5.30	263123 263143	51.40 55.60	763171 263141	56.80 61.00
27#72	14 16	14 14	33	26316	36.10	5.60	363162	59.90	263161	65.40
	18 <b>20</b>	14 14	35 38	26318 26320	39.20 42.60	5.80 6.00	263182 263202	63.70 67.90	<b>3631</b> 81 <b>36330</b> 1	69.20 73.30
1 1 1 1	22	16	43	26322	51.20	6.70	263777	85.60	263221	89.40
	24	16	46	26324	54.70	6.90 7.10	263242	90.10 94.30	263241 2632 <b>6</b> 1	94.20 98.70
	26 28	16 16	48 51	26326 26328	57.90 61.10	7.50	363362 363382	99.40	263281	104.40
	30	16	54 58	26330	64.20 67.70	7.70 7.90	363302 363322	103.50 108.00	263301 263321	108. <b>9</b> 0 113.70
	32 34	16 16	56 65	26337 26334	83.70	11.60	363343	134.40	263341	142.40
Cut No. 263							lace Con-			·····
		14	12	27392	knife Swit \$14.60	\$ 3.50	273022	\$31.00	273021	\$35.60
	3	14	14	27304	17.90	3.70	373043	35.00	273041	39.70
	6 8	14 14	17 20	27 <b>306</b> 27 <b>30</b> 8	20.90 23.90	4.10 4.30	273062 273082	39.20 42.90	773061 773081	44.10 47.90
	10	14	23	27310	27.00	4.70	373103	47.30	273101	<b>52.40</b>
	13	14 14	28 30	27813 27814	32.00 35.20	5.10 5.30	273132 273142	53.70 57.70	373121 373141	59.10 63.10
<del>(     )</del>   .	14 16	14	33	27316	35.20 38.20	5.30 5.60	273162	62.00	273161	67.50
1 7 7 7 1	18 <b>20</b>	14 14	36 38	27318 27320	41.30 44.70	5.80 6.00	373182 273293	65.80 70.00	273181 273201	71 .30 75 .40
1 1 1 1 1	22	16	45	27322	56.00	6.90	273222	91.40	273231	95.50
	24	16	47	27324 27326	59.50 62.70	6.90 7.10 7.30	273242 273262	95.90 100.00	373341 373361	100.30 104.70
1	26 28	16 16	50 53	27328	65.90	7.70	273282	105.20	273261	110.60
	30 37	16 16	56 58	27830 27832	69.00 72.50	7.90 8.10	273302 278822	109.30 113.60	273301 278321	115.00 119.70
، س س	34	16	65	27224	91.00	11.60	272242	141.70	273341	149.70

Cut No. 273

91.00 Add 5% to panels and barriers only for black enameled slate.
Add 25% to panels only for marble.
Add 100% to barriers only for marble.

27334

16

65

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141.70

278841

149.70

273342

11.60

Combination List Prices of

372341

205.00

372342

195.90

#### 125 V. Mains

Capacity 6 Amp. Per Branch



# PANEL BOARDS. Type 3-2-Wire Mains

Base Finish

Black slate, oiled finish, ½ inch thick.

Main and branch bus bars polished and lacquered.

10 Amp. D. P. Push Button Switches with D. P. N.C. fuse connections.

2-P-6 Dead Black Paint Finish.

1-P-6 Unfinished straight sawed oak. Fronts

2 0. 2. 4.000	R A N C		e of nel	Catalog Number,	List F	Prices	Panel-Ba	moination striers and Gutter	Code Ga	s of uge Steel
125 V. Branches	Ĉ H			Panel Only	Panel	Barriers		2-P-6 el Front	With All Woo	1-P-6 od Front
	Ē	Wide	High	Omy	Only	Only		List Price	1	
		'	!	!'	Main (	Cable Lu	<u>'</u>	1		1
	2	16	6	34202	\$ 7.30	\$3.30	342022	\$23.00	342021	\$27.30
	4 6	16 16	9 13	34204 34206	12.40 17.30	3.50 3.90	342042 342062	28.70 35.00	342041 342 <b>0</b> 61	33.20 39.70
	8	16	15	24208	22.20	4.10	342082	40,50	312081	45.30
00	10 12	16 16	18 21	34210 34212	27.40 32.70	4.30 4.70	342102 342122	46.40 53.00	342101 342121	51.30 58.10
	14 16	16	23 26	34214	38.20	4.90	342143	59.20	842141	64.50
	18	16 16	29	34216 34218	43.20 49.60	5.10 5.40	342162 342182	64.90 72.70	342161 342181	70.30 78.20
	20 22	16 16	32 35	34220	54.90	5.60	342202	78.80	342201	84.30
1	24	16	37	34222 34224	60.00 65.00	6.00 6.10	342222 342242	85.60 91.20	347771 347741	91.00 96.60
	26 28 30	16 16	40 43	34 226 34 228	70.10 75.40	6.30 6.70	342262 342282	99.40 109.80	342261 342281	102.60 113.60
	30 32	16 16	45 48	34230 34232	80.30	6.90	342302	115.70	342301	119.80
. 00 .	34	16	52	34234	85.30 106.90	7.10 7.50	842322 342342	121.70 145.20	342321 842341	126.10, 150.20
Cut No. 343						use Con				
	2	16 16	9	35202 <b>35204</b>	\$8.80 13.70	\$3.50 3.70	352022 352042	\$25.10	353021	\$29.60
Property Property	6	16	16	35206	19.10	4.10	352062	38.30 37.40	357041 357061	35.30 42.20
	8 10	16 16	19 21	35208 35210	23.90 29.20	4.50 4.70	352082 352102	43.60 49.50	352981 352101	48.60 54.60
	12	16	27	35212	35.40	5.20	352122	57.80	357171	63.20
400P 5 500Pd	14 16	16 16	30 33	35214 3521 <b>6</b>	40.90 45.90	5.40 5.80	352142 <b>35</b> 2162	64.00 70.70	352141 352161	69.50 76.20
	18	16	38	<b>3521</b> 8	53.90	6.10	352182	80.10	352181	85.50
	20 22	16 16	40 43	35220 352 <del>22</del>	59.20 64.30	6.30 6.70	352202 352222	88.50 98.70	352201 352221	91.70 102.50
	24	16 16	46 48	35224 35226	69.30 74.40	6.90 7.10	352242 352262	104.70	352241	108.80 115.20
	26 28 30	16	51	<b>3572</b> 8	79.70	7.50	352282	110.80 118.00	352361 352281	123.00
	32 30	16 16	53 56	35230 35232	84.60 89.60	7.70 7.90	352302 352322	$123.90 \\ 129.90$	<b>3523</b> 01 <b>3523</b> 21	129.30 135.60
· · · · · · · · · · · · · · · · · · ·	34	16	64	35234	116.80	9.60	352342	162.80	352341	170.20
Cut No. 352	2	- 16	10	90000		nife Swit		405.00		
	ž	16 16	10 <b>13</b>	36202 36204	\$11.60 16.50	\$3.50 3.90	362022 362042	\$27.90 34.20	362021 362041	\$32.40 38.90
	6 8	16 16	18 21	36206 36208	22.50 27.30	4.30 4.70	362062 362082	41.50	362061 362081	46 .40 52 .70
	10	16	24	36210	32.60	4.90	362102	47.60 53.60	362101	58.90
	12 14	16 16	29 32	36212 36214	40.70 46.20	5.40 5.60	362122 362143	63.80 70.10	367171 367141	69.30 75.60
	16	16	34	36216	51.20	5.80	367162	76.00	<b>36</b> 2161	81.50
The same	18 20	16 16	41 44	36218 36220	60.80 66.10	8.50 8.70	362182 362202	98.30 104.80	362181 362201	101.80 108.60
TT	5.5	16	47	36223 36224	71.20	9.20	365555	112.20	362221	116.60
<b>† † Ø</b>	24 26	16 16	49 52	36226	76.20 81.30	9.50 9.75	362242 362262	118.20 124.50	362341 362261	122.90 129.50
11 11 1	28 20	16 16	55 57	36228 36230	86.60 91.50	10.30 10.50	<b>3622</b> 82 <b>3023</b> 02	132.00 137.90	362281 367391	137.70 144.00
.     .	30 32	16 '	60	36232	96.50	10.80	367322	144.00	362321	150.40
Cut No. 362	84	16	68	36234	126.10	14.60	362342	183.90	362341	192.50
	-2	16	- <sub>11</sub> -	37202	Knife Swit	\$3.70	772022 372022	\$30.10	372021	\$34.60
	4	16	14	37204	17.90	3.90	372042	35.60	372041	40.30
	· 6	16 16	19 21	37 <b>206</b> 372 <b>0</b> 8	23.90 28.70	4.50 4.70	372062 372082	43.60 49.00	372061 372061	48.60 54.10
	10	16	24	37210	34.00	4.90	372102	55.00	372101	60.30
	12 14	16 16	31 33	37212 37214	43.90 49.40	5.60 5.80	372122 <b>3</b> 72142	67.80 74.20	372121 372141	73.30 79.70
	16	16	36	37216	<b>54</b> . <b>4</b> 0	6.00	372162 979199	80.00	372161	85.40
THE TAIL	18 20	16 16	43 46	37218 37220	65.30 70.60	8.70 9.00	372182 372202 372222	104.00 110.40 116.70	372181 372201 372221	107.80 114.50 121.10
<b>T T</b> _	5.5	16 16	48 51	3722 <b>2</b> 37224	75.70 80.70	$\frac{9.20}{9.75}$	37 <b>2</b> 242	116. <b>7</b> 0 123.90	372221 372241	121.10 128.90
	24 26 28 30	16 16	53 56	37226 37228	85.80 91 10	10.00 10.30	372262 372282	130.10 136.50	373261	128.90 135.50 142.20
i		16	59	37230	96.00	10.80	372302 372322	143.50	372281 372301	149.90
	32	16	61	87232	101.00	11.10	372322	149.80	872371	156.70

84 16 **7**0 37234 136.80 14.90

Add 5% to panels and barriers only for black enameled slate.
Add 25% to panels only for marble.
Add 100% to barriers only for marble.

Capacity 3 Amp. Per Branch

#### 125 V. Branches

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(FA)

Cut No. 343

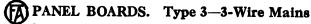
Cut No. 353

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34



Base Finish Branches Fronts

Black slate, oiled finish, 1/2 inch thick.

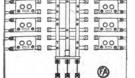
Main and branch bus bars polished and lacquered.

10 Amp. D. P. Push Button Switches with D. P. N. C. enclosed fuse connections.

2-P-6 Dead Black Paint Finish.

1-P-6 Unfinished straight sawed oak.

		1-	r-o cana	INTEG BELNIE	TE BE MEG C	MK.			
B ANCHES	Siz. Pa	e of nel	Catalog Number,	List I	Prices	Panel-Ba	rriers and Gutter	List Price Code Ga Boxes	
Ĉ		<del>.                                      </del>	Panel Only	Panel	Barriers		2-P-6 l Front		1-P-6 od Front
Ë	Wide	High	Ошу.	Only	Only	Cat. No.		Cat. No.	T
	<u>'</u>	<u>'</u>		Main	Cable Lu	rs Only			
2 -	16	• 7	34302	\$ 7.90	\$3.30	343022	\$23.60	343021	\$27.90
4	16	10	34304	13.20	3.50	343042	29.50	343041	34.00
•	16	13	34306	18.20	3.90	343062	35.90	343061	40.60
.8	16	15	<b>3430</b> 8	23.10	4.10	343082	41.40	343081	46.20
10	16	18	34310	28.20	4.30	343102	47.20	343101	52.10
12 14	16 16	21 24	34312 34314	34.00	4.70	843122	54.30	843121	59.40
16	16	27	34316	39.00 44.10	4.90 5.20	343142 343162	60.00 66.50	343141 343161	65.30 71.90
18	16	29	34318	49.20	5.40	343183	72.30	343181	77.80
20	16	32	34320	54.50	5.60	343202	78.40	343201	83.90
22	18	34	34322	60.90	6.00	348222	86.80	343221	91.80
24 26	18	36	34324	. 66.40	6.10	343242	92.90	343241	98.00
28	18 18	39 42	34326 34328	71.50 76.60	6.50 6.70	343262 343282	105.30	343261 343281	108.40 114.80
30	18	44	84330		6.90	343302	111.40 117.60	343301	121.40
32	18	47	34332	81.80 87.20	7.30	343322	125.00	343321	129.50
34	18	50	84334	102.00	7.59	343343	140.80	843341	145.60
				Main I	use Cons	ections			
2	16	10	35302	\$10.20	\$3.50	353022	\$26.50	353021	\$31.00
4	16	12	35304	15.50	3.70	353042	32.60	353041	37.10
<b>6</b> 8	16 16	15 17	35306 35308	20.50 25.40	4.10	353062	38.80	353061	43.60
10	16	20	35310	25.40 30.50	4.30 4.50	353082 353102	44.40 50.20	353081 353101	49.30 55.20
12	16	25	35312	36.70	5.10	353122	58.40	<b>853</b> 121	63.80
14	16	27	35314	41.70	5.20	353142	64.10	353141	69.50
16	16	30	35316	46.80	5.40	353162	69.90	353161	75.40
18	16	32	35318 35320	51.90	5.60	353182	75.80	353181	81.30
20	16	35		57.20	6.00	358202	82.80	353201	88.20
22 24	18 18	40 43	35322 35324	65.00 70.00	6.50 6.90	353222 353242	98.80	353221 353241	101.90
26	18	46	35326	75.60	7.10	353262	105.80 112.40	853261	109.60 116.50
28	18	48	35328	80.70	7.30	353282	118.50	353281	123.00
30	18	51	35330	85.90	7.70	353302	125.80	853301	130.90
32	18	54	35332	91.30	7.90	353322	132.30	353321	137.60
84	18	59	35334	108.10	8.50	353342	152.30	353341	158.50
2	16	- <del>11</del>	36302		nife Swit	363022	<b>e</b> 21 50	969091	36 00
ĩ	16	14	36304	\$14.40 19.70	\$3.70 3.90	363042	\$31.50 37.40	363021 363041	36.00 42.10
ē	16	16	36306	24.70	4.10	363062	43.00	363061	47.80
.8	16	19	<b>3630</b> 8	29.60	4.50	363082	49.30	<b>36</b> 3081	54.30
10	16	21	36310	34.70	4.70	363102	55.00	363101	60.10
12 14	16 16	27 29	36312 36314	41.80	5.20	363122 363142	64.20	363121	69.60
16	16	32	3631 <b>6</b>	46.80 51.90	5.40 5.60	3631 <b>6</b> 2	69.90 75.80	363141 363161	75.40 81.30
18	16	35	36318	57.00	6.00	363182	82.60	363181	88.00
20	16	37	36320	62.30	6.10	363202	88.50	863201	93.90
. 22	18	42	36322	72.90	6.70	863222	107.70	363221	111.10
24	18	45	36324	78.40	7.10	363242	115.20	363241	119.30
26 28	18 18	47 50	36326 36328	83.50 88.60	7.30 7.50	363262 363282	121.30 127.40	363261 363281	125.80 132.20
<b>80</b>	18	53	36330	93.80	7.90	363302	134.80	363301	140.10
32	18	55	36332	99.20	8.10	363322	141.30	363331	146.90
84	18	62	36334	117.20	11.20	363342	168.10	363341	174.80
			Main I	Knife Swit	ch with F	use Conn	ections		
2	16	12	37302	\$16.50	\$3.70	373022	\$33.60	373021	\$38.10
6	16 16	14 17	37304 37396	21.80	3.90 4.30	373042 373062	39.50	373041 373061	44.20
8	16	19	37308	26.50 31.70	4.50	373082	45.50 51.40	373061	50.40 56.40
1Ŏ	16	22	37310	36.80	4.70	873102	57.10	373101	62.20
12	16	27	37812	43.90	5.20	373122	66.30	873121	71.70
14	16	30	87314	48.90	5.40	373142	<b>72.00</b>	373141	<b>77.50</b>
16	16	32	37316	54.00	5.60	373162	77.90	373161	83.40
18 <b>20</b>	16 16	35 38	37318 37320	59.10 64.40	6.00 6.10	37 <b>3</b> 182 373202	84.70 90.60	373181 373201	90.10 96.00
23	18	44	37322	77.70	6.90	873222	113.50	<b>3</b> 73221	117.30
24	18	47	37824	83.20	7.30	378242	121.00	373241	125.50
26	18	49	37326	88.30	7.50	373262	127.10	373261	131.90
28	18	52	37328	93.40	7.70	373282	133.30	373281	138.40
30 32	18 18	54 57	373 <b>30</b> 37832	98.60 104.00	7.90 8.30	373302 373322	139.60 147.10	373301 373321	144.90 153.00
	_ 0	٠.		202.00	5.00				



Cut No. 343

18 124.50 11.40 Add 5% to panels and barriers only for black enameled slats.
Add 25% to panels only for marble.
Add 100% to barriers only for marble.

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176.60 Digitized by GO 183.80

373341

Capacity 6 Amp. Per Branch

125 V. Branches

# PANEL BOARDS. Type 4—2-Wire Mains Black slate, oiled finish, 1/2 inch thick. Main and branch bus bars polished and lacquered. thes 10 Amp. D. P. Ind. Snap Switches with D. P. N. C. fuse connection 2-P-6 Dead Black Paint Finish, 1-P-6 Unfinished straight sawed oak.

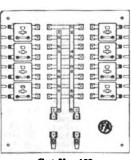
Branches Fronts

R ANC		e of nel	Catalog Number,	List 1	Prices	Combination List Prices of Panel-Barriers and Code Gauge Steel Gutter Boxes			
C H E S	Wide	High	Panel Only	Panel Only	Barriers Only	With All Stee Cat. No.		All Woo	
				Main	Cable Lu	es Only	<u>'</u>		
2	1.1	G	44902	& A 00	<b>8</b> 2 10	449493	<b>821 00</b>	449891	636 30

1.	• • • • • • • • • • • • • • • • • • • •

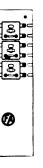
-	No.	449

ŝ	Wide	111.811		Ощу	Omy	Cat. No.	List Price	Cat. No.	List Price				
	Main Cable Lugs Only												
2	14	6	44202	\$ 6.90	\$ 3.10	442022	\$21.90	442021	\$26.30				
4	14	9	44304	11.60	3.30	442042	<b>27.30</b>	442041	31.80				
6	14	13	44206	16.10	•3.70	442062	33.20	442061	37.90				
8	14	15	44208	20.60	3.90	442082	38.30	442081	43.19				
10	14	18	44310	25.40	4.10	442102	43.70	443101	48.60				
12	14	21	44312	30.30	4.50	442122	49.90	442121	54.90				
14	14	23	44314	35.40	4.20	442142	55.70	442141	60.80				
16	14	26	44216	40.00	4.90	443163	61.00	442161	66.30				
18	14	20	44218	46.00	5.30	442183	68.50	443181	73.90				
20	14	32	44220	50.90	5.40	442202	74.00	442201	79.50				
22	14	35	44323	55.60	5.80	442222	80.10	442321	85.60				
24	14	37	44324	60.20	6.00	443343	85.50	442341	90.90				
26	14	40	44326	64.90	6.20	442363	93.40	442261	96.40				
28	14	43	44228	69.80	6.50	442282	103.10	442381	106.50				
30	14	45	44230	74.30	6.70	442302	108.40	442301	112.20				
33	14	48	44333	<b>78.90</b>	6.90	443333	113.90	442321	118.00				
34	16	52	44234	99.70	7.50	442842	138.00	442341	143.00				



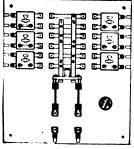
Cut No. 452

Main Fuse Connections											
2	14	9	45202	\$ 8.40	\$ 3.30	452022	\$24.10	452021	\$28.60		
4	14	12	45204	· 12.90	3.50	452042	<b>29.30</b>	452041	33.90		
6	14	16	45206	17.90	3.90	452062	35.60	452061	40.40		
8	14	19	45206	22.30	4.30	452082	41.30	452081	46.30		
10	14	21	45310	27.20	4.50	453103	46.80	452101	51.80		
12	14	27	45213	33.00	5.10	452122	54.70	452121	60.10		
14	14	30	45214	38.10	5.30	452142	60.60	452141	66.00		
16	14	33	45316	42.70	5.60	453163	66.50	453161	72.00		
18	14	38	45218	50.30	6.00	457187	75.60	452181	81.00		
20	14	40	45220	55.20	6.20	452302	83.70	452201	86.70		
22	14	43	45222	59.90	6.50	452222	93.20	453331	96.60		
24	14	46	45224	64.50	6.70	452242	98.60	452241	102.40		
26	14	48	45226	69.20	6.90	452263	104.20	452261	108.30		
28	14	51	45228	74.10	7.30	452282	110.80	452281	115.70		
30	14	53	45330	78.60	7.50	452303	116.20	452301	121.30		
32	14	56	45332	83.20	7.70	457323	121.80	452321	127.30		
34	16	64	45234	109.60	9.50	452343	155.60	452341	163.00		



Cut No. 463

	Main Line Switch Only											
2 4	14	10	46203	\$11.20	\$ 3.30	462922	\$26.90	462021	\$31.40			
	14	13	46204	15.70	3.70	463042	32.80	462041	37.50			
8 10	14 14 14	18 21 24	46206 46208 46210	21.30 25.70 30.60	4.10 4.50 4.70	462062 462082 462102	39.60 45.30 50.90	462961 462981 462191	44.50 50.30 56.00			
12	14	29	46213	38.30	5.30	462122	60.80	462121	66.20			
14	14	32	46214	43.40	5.40	462142	66.50	462141	72.00			
16	14	34	46216	48.00	5.60	462163	71.80	462161	77.30			
18	14	41	46218	57.20	8.20	462182	93.30	462181	96.60			
20	14	44	46220	62.10	8.50	462292	99.50	462301	102.90			
22	14	47	46222	66.80	9.00	462222	106.10	462321	110.20			
24	14	49	46224	71.40	9.20	462242	111.70	462241	116.20			
26	14	52	46226	76.10	9.50	462262	117.40	462201	122.30			
28	14	55	46228	81.00	10.00	462282	124.50	462281	130.00			
30	14	57	46230	85.50	10.30	462302	130.00	462301	136.00			
37	14	60	46232	90.10	10.50	462322	135.70	462321	142.10			
34	16	68	46234	118.90	14.60	462342	176.70	462341	185.30			



**Cut No. 472** 

14	16	68	46234	118.90	14.60	467347	176.70	462341	185.30
			Main	Knife Swit	ch with F	use Conn	ections		
2 4	14	11	· 47202	\$12.60	\$ 3.50	472022	\$29.00	472021	\$33.60
	14	14	47204	17.10	3.70	472042	34.20	472041	38.90
6	14	19	47206	22.70	4.30	472063	41.70	472061	46.70
8	14	21	47208	27.10	4.50	472083	46.70	472081	51.70
10	14	24	47210	32.00	4.70	472102	52.30	472101	57.40
12	14	31	47212	41.50	5.40	472122	64.60	473131	70.10
14	14	33	47214	46.60	5.60	472142	70.40	472141	75.90
16	14	36	47216	51.20	5.80	472163	75.70	473161	81.20
18 80	14 14 14	43 46 48	47218 47220 47222	61.70 66.60 71.30	8.50 8.70 9.00	472182 472202 472222	99.10 104.90 110.60	472181 472201 472331	102.50 108.20 114.70
14	14	51	47234	75.90	9.50	472242	117.20	473341	122.10
16	14	53	47236	80.60	9.80	472262	122.90	473301	128.00
18	14	56	47238	85.50	10.00	472282	129.00	472381	134.50
30	14	59	47230	90.00	10.50	472302	135.60	472301	142.00
32	14	61	47232	94.60	10.80	472322	141.40	472321	148.20
84_	16	70	47234	129.60	14.90	472342	188.70	477341	197.80

Add 5% to panels and barriers only for black enameled slate.
Add 25% to panels only for marble.
Add 100% to barriers only for marble.
Digitized by

Capacity 3 Amp. Per Branch

# (FA) PANEL BOARDS. Type 4—3-Wire Mains

Base Finish Branches Fronts

Black slate, oiled finish, ¼ inch thick.
Main and branch bus bars polished and lacquered.
10 Amp. D. P. Ind. Snap Switches with D. P. N. C. enclosed fuse con.
2-P-6 Dead Black Paint Finish.
1-P-6 Unfinished straight sawed oak.

Per Branch	B	T					Con	mbination	List Price	of
	Ā		e of nel	Catalog	List :	Prices	Panel-Ba	<b>rriers a</b> nd Gutter	Code Gas Boxes	ige Steel
125 V. Branches	Ç			Number, Panel	Penal	Barriers		2-P-6 el Front		1-P-6 d Front
	BRANCHES	Wide	High	Only	Panel Only	Only	Cat. No.		,	
		·	<b>'</b>	1	Main (	Cable Lugs	Only	·	·	•
	2	14 14	7 10	44302 44304	\$ 7.50 12.40	\$ 3.10 3.30	443022 443042	\$22.50 28.10	443031 443041	\$26.90 32.60
DEFENDE NO TO TO THE		14	13	44306	12.40 17.00	3.70	443062	28.10 34.10	443061	38.80
between and I was an end	8 16	14 14	15 18	44 <b>30</b> 8 44 <b>310</b>	21.50 26.20	3.90 4.10	443082 4431 <b>03</b>	39.20 44.50	443081 443101	44.00 49.40
	12 14	14 14	21 24	44313 44314	31.60 36.20	4.50 4.70	443123 443143	51.20 56.50	443131 443141	56.20 61.60
	16	14	27	44316	40.90	5.10	443162 443183	<b>62</b> .60	443161	68.00 73.50
PERSONAL CONTRACTOR	18 <b>26</b>	14 14	29 32	44318 44 <b>320</b>	45.60 50.50	5.30 5.40	443202	68.10 73.60	443181 4432 <b>0</b> 1	79.10
	32 24	16 16	34 36	44323 44324	56.50 61.60	5.80 6.00	448222 443242	81.30 87.20	443221 443241	86.80 92.60
	26	16	39	44326	66.30 71.00	6.30	443262 443283	95.60 104.40	443261 443281	98.80 107.90
	78 30	16 16	42 44	44338 44330	75.80	6.50 6.70	443307	110.20	443301	114.00
	32 34	16 16	47 50	44332 44334	80.80 95.20	7.10 7.30	443322 443342	117.20 132.50	443371 443341	121.60. 137.20
Cut No. 443						Fuse Cont				
	3	14	10	45302	\$ 9.80	\$ 3.30	453022	\$25.50	453031	\$30.00
	4	14 14	12 15	453 <b>04</b> 453 <b>06</b>	14.70 19.30	3.50 3.90	453043 45 <b>30</b> 63	31.10 37.00	45 <b>304</b> 1 45 <b>306</b> 1	35.70 41.80
DE 6-9 5 6 9 1 0 5 6 9 9 10 C	8 16	14 14	17 20	45 <b>30</b> 8 45 <b>3</b> 10	23.80 28.50	4.10 4.30	453082 453102	42.10 47.50	453081 453101	47.00 52.50
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	13	14	25	45313	34.30	4.90	453122	55.30	453121	60.60
	14 16	14 14	27 30	45314 45316	38.90 43.60	5.10 5.30	453142 453162	60.60 66.10	453141 453161	66.00 71.50
200000000000000000000000000000000000000	18 <b>26</b>	14 14	32 35	45318 45320	48.30 53.20	5.40 5.80	453182 453202	71.40 77.70	453181 453201	76.90 83.20
	23	16	40	45822 45324	60.60 65.70	6.30 6.70	453223 453242	89.90 100.10	453221 453241	93.10 103.90
	24 26	16 16	43 46	45326	70.40	6.90	453262	105.80	453261	109.90
	28 30	16 16	48 51	45328 45 <b>330</b>	75.10 79.90	7.10 7.50	453282 453302	111.50 118.20	453281 453301	115.90 123.20
. 999 .	32 34	16 16	54 59	45337 45334	84.90 101.40	7.70 8.30	458322 453342	124.20 143.50	453331 453341	129.60 149.90
Cut No. 453						Inife Swit				
	3	14	11	46303	\$14.00	\$ 3.50	463022	\$30.40	463031	\$35.00
	4	14 14	· 14 16	46304 463 <b>0</b> 6	18.90 23.50	3.70 3.90	463 <b>0</b> 43 463 <b>0</b> 63	36.00 41.20	463041 463061	40.70 46.00
	` 8	14 14	19 21	4 <b>53</b> 08 <b>46310</b>	28.00 32.70	4.30 4.50	4 <b>630</b> 82 4 <b>63</b> 102	47.00 52.30	463081 463101	52.00 57.30
	13	14	27	48312	39.40	5.10 5.30	46312 <del>3</del> 463143	61.10 66.50	463131 463141	66.50 71.90
PERSENTED ENGINEERS ENGINEERS	14 16	14 14	29 32	46314 46316	44.00 48.70	5.40	463163	71.80	463161	77.30
	18 <b>20</b>	14 14	35 37	46318 46320	53.40 58.30	5.80 6.00	463182 463202	77.90 83.60	463181 463201	83 . 40 89 . 00
	22	16 16	42 45	46322 46324	68.50 73.60	6.50 6.90	463222 463242	101.90 109.00	463221 463241	105.40 113.10
<b>45 46 46</b>	24 26	16	47	46326	78.30	7.10	463262 463282	114.70	463261 463281	119.10 125.00
† † † ®	28 38	16 16	50 53	46328 46330	83.00 87.80	7.30 7.70	463302	120.30 127.10	463301	132.50
	32 34	16 16	55 62	46332 46334	92.80 110.40	7.90 11.10	4 <b>63</b> 322	133.10 159.20	463321 463341	138.80 166.10
Cut No. 463						tch with i	Fuse Con			
	2	14	12	47302	\$16.10	\$ 3.50	473022	. \$32.50	473021	\$37.10
	6	14 14	14 17	47304 47306	21.00 25.60	3.70 4.10	473042 473062	38.10 43.90	473041 473061	42.80 48.80
Defended at the tale at the party	8 10	14 14	19 22	47 <b>30</b> 8 47 <b>3</b> 10	30.10 34.80	4.30 4.50	473082 473102	49.10 <b>54.4</b> 0	473081 473101	54 . 10 59 . 40
	13	14	27	47312 47314	41.50 46.10	5.10	473122 473142	63.20	473131 473141	68.60 74.00
	14 16	14 14	30 32	47316	50.80	5.30 5.40	473162	68.60 73.90 80.00	473161	79.40
	18 <b>26</b>	14 14	35 38	47318 47320	55.50 60.40	5.80 6.00	473182 47 <b>320</b> 2	80.00 85.70	473181 47 <b>320</b> 1	85.50 91.10
	22 24	16 16	44 47	47 <b>323</b> 47324	73.30 78.40	6.70 7.10	473222 478242	107.70 114.80	473331 473241	111.50 119.20
	26	16 16	49	47326 47328	83.10 87.80	7.30 7.50	478262 473282	120.40 126.10	473201 473281	125.10 131.10
	38 30	16	52 54	47330	92.60	7.70	473302	131.90	478301	137.30
	32 34	16 16	57 64	47382 47334	97.60 117.70	8.10 11. <b>3</b> 0	473322 473342	138.70 167. <b>5</b> 0	473821 478841	144.80 174.10
Cut No. 473		Add 5	% to p	anels and	barriers on	ly for black	enameled	slate.	σle	
					y for marb only for ma		gitized by '	GOO	316	

Capacity 6 Amp.

Per Branch

125 V. Branches

# (FA) PANEL BOARDS. Type 5—2-Wire Mains

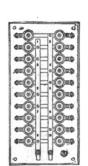
Base Finish Branche Fronts Black slate, oiled finish, ¼ inch thick.

Main and branch bus bars polished and lacquered.

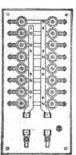
Double Pole Edison plug fuse connection.

2-P-6 Dead Black Paint Finish

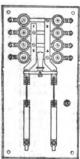
	Front	is	Double Fole Edison plug tuse connection.  2-P-6 Dead Black Paint Finish.  1-P-6 Unfinished straight sawed oak.										
B R A N	Size of Panel		Catalog	List I	Prices	Combination List Prices of Panel-Barriers and Code Gauge Steel Gutter Boxes							
C			Number, Panel		<del></del>	With All Stee	2-P-6	With	1-P-6				
H E S	Wide	High	Only	Panel Only	Barriers Only	Cat. No.	List Price	1	List Price				
			· · · ·	Main	Cable Lug	s Only	·						
2	8	6	54202 54304	\$ 4.20 6.40	\$ 2.60 2.80	542022	\$16.80	542021 542041	\$21.30 24.20				
6	8	13	54206		3.20	543042 543063	19.60 22.80	543061	27.70				
8 10	8	16	54208 54210	8.60 10.70 12.70	3.40	542082	<b>25</b> .60	542081	30.60				
13	8	19 22	54313	15.40	3.80 4.00	5431 <b>0</b> 3 543122	28.50 31.80	543161 543131	33.90 37.20				
14 16	8	25	54214	17.90 19.90	4.40	543143	35.10 37.70	547141	40.90 43.70				
18	10	28 32	54316 54318	23.60	5.30	543163 543183	44.20	542161 542181	50.00				
20	10	35	54330	25.80	5.50	543203	47.60	542201	53.50				
22 24	10 10	38 40	54333 54224	28.20 30.30	5.70 5.90	542223 542242	50.70 56.60	54 <b>333</b> 1 543341	56.50 59.40				
26 28	10 10	43 46	54226 54228	32.70 34.90	6.20 6.40	543363 543383	63.00 66.00	54 <b>336</b> 1 54 <b>33</b> 81	66.10 69.20				
39	10	49	54230	37.10	6.80	543303	69.80	543301	73.40				
33	10	52	54732	39.30	7.00	543823	72.80	543831	76.80				
34	12	56	54334	57.60	7.60	543343	95.00	542341	100.30				
-3	- 8	9	55202	\$ 5.70	Fuse Conn \$ 2.80	552022	\$18.90	552021	\$23.50				
4	8	12	55204	7.90	3.00	552043	21.70	552041	26.40				
<b>\$</b>	8 8	17 20	55706 55 <b>20</b> 8	10.40 12.50	3.60 3.80	552062 552082	25.80 28.30	552061 552081	30.90 33.70				
10	8	22	55210	14.50	4.00	552102	<b>3</b> 0.90	552101	36.30				
13	8	29	55212	18.10	4.80	552122	36.40	552121	42.50				
14 16	8 8	32 35	55214 55216	20.60 22.60	4.90 5.50	553142 553163	39.50 42.50	552141 552161	45.70 48.90				
18	10	40	55718	27.90	5.90	552182	54.20	552181	57.00				
20 22	10 10	43 46	55220 55222	30.10 32.50	6.20 6.40	5522 <b>02</b> 5 <b>5222</b> 2	60.40 63.60	552201 552221	63.50 66.80				
24	10	49	55324	34.60	6.80	553243	67.30	553341	70.90 74.50				
26 28	10 10	52 55	55226 55228	37.00 89.20	7.00 7.40	552262 552282	70.50 74.10	552261 552281	79.00				
30 32	10 10	57 60	55 <b>730</b> 55 <b>73</b> 7	41.40 43.60	7.60 7.80	552302 552322	77.00 79.90	552301 552321	82.40 85.80				
84	12	69	55734	67.50	9.90	552342	112.90	552341	121.70				
					nife Swit								
3	8	10	56202	\$ 8.50	\$ 2.80	563033	\$21.70	562021	\$26.30				
4	8	13	56704	10.70	3.20	563043	24.90	563041 562061	29.80				
8	8 8	19 22	56206 56208	13.80 15.90	3.80 4.00	563062 563083	29.60 32.30	562081	35.00 37.70				
10	8	25	56310	17.90	4.40	562102	35.10	563101	40.90				
12 14	8 8	31 33	56313 56314	23.40 25.90	4.90 5.10	56212 <b>3</b> 562142	42.30 45.20	563131 563141	48.50 51.50				
16	8	36	56316	27.90	5.50	563163	47.80	563161	54.20				
18 <b>20</b>	10 10	44 47	56218 56220	34.80 37.00	8.10 8.60	563182 563203	68.80 72.80	562181 562201	71.90 76.20				
23	10	50	56222	39.40	8.80	562233	76.10	563331	79.70 83.20				
24 26	10 10	52 55	562 <b>34</b> 56236	41.50 43.90	9.10 9.60	562342 567367	79.20 83.20	563341 563361	88.10				
78 30	10 10	58 <b>61</b>	56228 56230	46.10 48.30	9.90	562282 562302	86.20 90.10	562281 562301	91.60 96.40				
32	iŏ	64	56732	50.50	10.40 10.70	562322	93.10	562321	99.80				
34	12	72	56384	76.80	14.60	562343	132.70	562341	141.80				
				Knife Swi					400 40				
2	8 8	11 14	572 <b>03</b> 57 <b>204</b>	\$ 9.90 12.10	\$ 3.00 3.20	573023 573043	\$23.70 26.30	572021 572041	\$28.40 31.20				
6	8	19	57206	15.20	3.80	572063	31.00	577061	36.40 39.10				
8 10	8 8	22 25	57 <b>2</b> 08 <b>57210</b>	17.30 19.30	4.00	57208 <b>3</b> 57 <b>3103</b>	33.70 36.50	572081 572101	39.10 42.30				
12	8	32	57213	26.60	4.90	573123	45.50	573131	51.70				
14	8	35	57214	29.10	5.50 5.70	573142	49.00 51.80	572141 572161	55.40 58.00				
16 18	8 10	38 45	57 <b>216</b> 57 <b>21</b> 8	31.10 39.30	8.30	572162 572182	74.20	572181	77.40				
20	10	48	57220	41.50	8.60	572202	77.30	573301 573331	80.70 85.60				
22 24	10 10	51 54	57222 57234	43.90 46.00	9.10 9.40	572323 572343	81.60 84.50	572241	88.90				
26 28	10 10	57	57226	48.40 50.60	9.90	57 <b>3362</b> 57 <b>33</b> 83	88.60 91.50	57 <b>776</b> 1 57 <b>77</b> 81	93.90 97.40				
30	10	60 63	57 <b>22</b> 8 57 <b>230</b>	<b>52.80</b>	10.10 10.70	572302	95.40	572301	102.10 105.70				
33	10	66	57232	55.00	10.90	572332	98.40	573331	105.70				



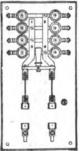
Cut No. 542



Cut No. 552



Cut No. 562



Cut No. 572

12

Add 5% to panels and barriers only for black enameled slate.
Add 25% to panels only for marble.
Add 100% to barriers only for marble.

14.90

87.50

144.60

572341

154.10

Capacity 3 Amp. Per Branch

125 V. Branches



## PANEL BOARDS. Type 5-3-Wire Mains

Branches

Black slate, oiled finish, 1/2 inch thick.

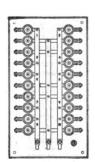
Main and branch bus bars polished and lacquered.

Double Pole Edison Plug fuse connection.

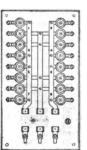
2-P-6 Dead Black Paint Finish.

1-P-6 Unfinished straight sawed oak.

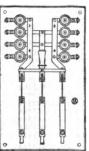
1-1-0 Chilimated Stratgit sawed Cal.										
	BRAN		e of nel	Catalog Number,	List	Prices	Cor Panel-Ba	nbination rriers and Gutter	Code Ga	s of uge Steel
•	Ë			Panel	Panel	Barriers	With All Stee			1-P-6 od Front
-	E	Wide	High	Only	Only	Only	Cat. No.		Cat. No.	
		<u> </u>			Main	Cable Lu	ra Only	'		
	2	8	7	54302	\$ 4.90	\$ 2.60	543022	\$17.50	543021	\$22.00
	4	8	10	54304	7.20	2.80	543042	20.40	543041	25.00
	8	8 8	13 16	54306 54308	9.20 11.60	3.20 3.40	543062 543082	23.40 26.50	543061 543081	28.30 31.50
	16	8	19	54310	14.00	3.80	543103	29,80	543101	35.20
	12 14	8 8 8 8	23 26	54313 54314	16.80 18.90	4.20 4.40	543122 543142	33.60 36.10	543121 543141	39.30 41.90
	16	8	29	54316	21.30	4.80	543163	39.60	543161	45.70
	18 <b>26</b>	8	31 34	54318 54320	23.50 25.90	4.90 5.10	543182 543202	42.40 45.20	543181 543201	48.60 51.50
	22	10	37	54322	29.70	5.70	543222	52.20	543221	58.00
	24	10	39	54334	32.10	5.90	543343	58.40	543241	61.20
	26 28	10 10	42 45	54376 54378	34.50 36.70	6.00 6.40	543262 543282	64.00 67.80	543261 543281	67.00 71.00
	30	10 10	48 51	54330 54332	39.00	6.60	543302	70.90	543301	74.30
	32 34	12	55	54334	41.40 53.20	7.00 7.60	543322 548342	74.90 90.60	543321 543341	78.90 95.90
							nections			
	- 2	8	10	55392	\$ 7.20	\$ 2.80	553022	\$20.40	553021	\$25.00
	6	8 8	13 15	55304 55306	9.50 11.50	3.20 3.40	553042 553062	23.70 26.40	553041 55 <b>306</b> 1	28.60 31.40
	8	8 8 8	18	55308	13.90	3.60	553082	<b>29</b> .30	<b>5530</b> 81	34.40
	10		21	55310	16.30	4.00	553102	32.70	553101	38.10
	12 14	8 8 8 8	26 29	55312 55314	19.50 21.60	4.40 4.80	553122 553142	36.70 39.90	553131 553141	42.50 46.00
	16	8	32	55316	24.00	4.90	553162	42.90	553161	49.10
	18 20	8	35 38	55318 55320	26.20 28.60	5.50 5.70	553183 553203	46.10 49.30	553181 5532 <b>0</b> 1	52.50 55.50
	. 22	10	43	55322	33.80	6.20	553232	64.10	553221	67.20
	24 26	10 10	46 49	55324 55326	36 20 38.60	6.40 6.80	553 <b>34</b> 3 55 <b>326</b> 3	67.30 71.30	553241 553261	70.50 74.90
	28	10	52	55328	40.80	7.00	553282	74.30	553281	78.30
	30 32	10 10	55 58	55330 55332	43.10 45.50	7.40 7.60	553303 553322	78.00 81.10	55 <b>336</b> 1 55 <b>332</b> 1	82.90 86.50
	34	12	63	55834	59.40	8.40	553342	100.30	553341	107.50
					Main I	Inife Swit	ch Only			
	7	8	11	56302		\$ 3.00	563022	\$25.20	563021	\$29.90
	4	8 8	14 17	56304 56306	\$11.40 13.70 15.70	3.20 3.60	563042 5 <b>63</b> 062	27.90 31.10	563041 563061	32.80 36.20
	8	8	20	56308	18.10	3.80	563082	33.90 37.30	563081	39.30
	10 13	8	23 28	56310 56313	20.50	4.20	563103	37.30 42.40	563101 563131	43.00
	14	8 8 8	31	56314	24.60 26.70	4.60 4.90	5 <b>63122</b> 5 <b>63142</b>	45.60	563141	48.40 51.80
	16 18	8 8	34 37	56316 56318	29.10 31.30	5.10 5.70	563162 563182	48.40 52.00	563161 563181	54.70 58.20
	20	8	40	56320	33.70	5.90	563202	58.50	563301	61.30
	22	10	45	56322	41.70	6.40	563222	72.80	563221	76.00
	24 26	10 10	48 51	5632 <u>4</u> 56326	44.10 46.50	6.60 7.00	563242 563262	76.00 80.00	563341 563361	79.40 84.00
	28	10	54	56328	48.70	7.20 7.60	563282	82.90	563281	87.30
	30 32	10 10	57 60	56330 56232	51.00 53.40	7.80	563302 563322	86.60 89.70	563301 563 <b>32</b> 1	92.00 95.60
	34	12	67	56334	68.40	11.40	563342	116.60	563341	124.80
				Main I	Knife Swi	tch with	Fuse Con	nections		
	7	8	11 15	57302 57304	\$13.50 15.80	\$ 3.00 3.40	573022 573042	\$27.30 30.70	573021 573041	\$32.00 35.70
	6	8	17	57306	17.80	3.60	573062	33.20	573961	38.30
	8 10	8 8	20 23	57308 57310	20.20 22.60	3.80 4.20	573082 573102	36.00 39.40	573 <b>0</b> 81 573101	41.40 45.10
	12	8	29	87312	26.70	4.80	573122	45.00	573121	51.10
	14	8	32	57314	28.80	4.90	573142	47.70 50.50	573141	53.90
	16 18	8 8	34 37	57316 57318	31.20 33.40	5.10 5.70	573162 573182	54.10	573161 573181	56.80 60.30
	20	8	40	57320	35.80	5.90	573202	60.60	573701	63.40
	22 24	10 10	47 50	57322 57 <b>324</b>	46.50 48.90	6.60 6.80	573222 573242	78.40 81.60	573221 573241	81.80 85.20
	26	10	50 53	57336	51.30	6.80 7.20	573262	85.50	573261	89.90
	28 30	10 10	56 58	57328 57330	53.50 55.80	7.40 7.60	573282 573302	88.40 91.40	573281 573301	93.30 96.80
	33	iŏ	61	57332	- 58.20	8.00	573322	95.30	573821	101.60
		• • •			#F #A			400 00		400 40



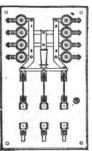
Cut No. 543



Cut No. 553



Cut No. 563



Cut No. 573

12 68

75.70 Add 5% to panels and barriers only for black enameled slate.
Add 25% to panels only for marble.
Add 100% to barriers only for marble.

11.40

573342

123.90

573841

132.10

57334

Combination List Prices of

#### 125 V. Mains

Capacity 6 Amp. Per Branch

### 125 V. B

Cut

Cut

Cut

Out No. 672



## PANEL BOARDS. Type 6-2-Wire Mains

Branches Fronts

Black slate, oiled finish, ½ inch thick.
Main and branch bus bars polished and lacquered.
30 Amp. D. P. Knife Switches with D. P. Edison plug fuse connections.
2-P-6 Dead Black Paint Finish.
1-P-6 Unfinished straight sawed oak.

	Ē	Size	e of		List 1	Prices	Panel-Ba	mbination triers and	List Price Code Ga	s of use Steel
, ,	N C	Pa	nel	Catalog Number,				Gutter	Boxes	
Branches	C			Panel Only	Panel	Paris		2-P-6		1-P-6 d Front
	Ē	Wide	High	Ощу	Only	Barriers Only	Cat. No.	List Price		
		<u>'                                    </u>	'		Main C	able Luga		1	1000	
	2	12	6	64202	\$ 5.50	\$ 3.00	642022	\$19.90	642021	\$24.40
- O	4	12	9	64204	8.50	3.20	647047	23.50	647041	28.20
(h-m)	<b>6</b> 8	12 12	14 17	64206 64208	11.60 14.80	3.60 4.00	642062 642082	28.00 32.60	<b>642061</b> <b>6420</b> 81	32.90 37.60
Om al	10	12	20	64710	17.70	4.20	642162	36.10	642101	41.10
- (Dus-4)	12	12	23	64217	21.30	4.60	642133	41.10	642121	46.20
( ) ( ) ( ) ( ) ( ) ( )	14 16	12 12	26 29	64214 64216	24.90 27.90	4.80 5.20	642142 642163	45.40 49.80	642141 642161	50.60 55.10
(D) 233-47)	19	12	33	64718	32.60	5.50	642182	55.50	647181	61.00
( ) ( ) ( ) ( ) ( )	20	12	36	64220	35.80	5.70	642202	59.50	642201	64.90
- O 233-47	22 24	12 12	39 <b>42</b>	64223 °	39.10 42.20	6.10 6.20	642222 642242	66.90 73.50	643321 643341	69.70 76.60
- On-	26	12	45	64226	45.50	6.60	642262	<b>78.60</b>	642261	82.10
0	78 30	12 12	48 52	64228 6423 <b>0</b>	48.70 51.80	6.80 7.20	642383 642303 -	82.70 87.50	642281 642301	86.50 92.10
0	33	12	55	64282	55.00	7.60	642322	92.40	642321	97.70
No. 642	84	14	59	64234	74.40	8.10	642342	114.80	642341	121.20
					Main	ruse Cont	nections			
NO THE OWNER OF THE OWNER OWNER OF THE OWNER O	24	12 12	$\begin{array}{c} 9 \\ 12 \end{array}$	65202 65204	\$ 7.00 10.00	\$ 3.20	652022 652042	\$22.00	653031	\$26.70 30.50
- O	-	12	17	65206	13.40	3.40 4.00	652062	25.70 31.20	653041 653061	36.20
(Om-4)	8	12	20	65208	16.60	4.20	652082	35.00	652081	40.00
- O	10	12	23	65310	19.50	4.60	653103	39.30	653101	44.40
- 0	12 14	12 12	30 33	65212 65214	24.00 27.60	5.20 5.50	652122 652142	45.90 50.50	<b>65</b> 2121 <b>65</b> 2141	51.20 56.00
	16	12	36	65216	30.60	5.70	652162	54.30	652161	59.70
0	18	12	41	65218	36.90	6.20	652182	68.20	652181	71.30
	20 23	12 12	44 48	65220 65222	40.10	6.40 6.80	652202 652222	72.30 77.40	652201 652221	75.50 81.20
3	24	12	51	65224	43.40 46.50	7.20	652242	82.20	652241	8G.80
	36	12	54	05226	49.80	7.40	652262	86.30	652261	91.30
	28 30	12 12	57 60	65229 65230	53.00 56.10	7.80 8.00	652282 652302	91.30 95.20	652281 652301	97.10 101.40
0 0	33	12	63	65232	59.30	8.40	652322	100.20	652321	107.40
No. 652	34	14	71	65234	84.30	10.10	682342	132.40	652341	141.90
	2	12	10			inife Swit		<b>904</b> va		#20 E0
	ĩ	12	13	66202 66204	\$ 9.80 12.80	\$ 3.20 3.60	<b>0</b> 63 <b>0</b> 23 <b>6</b> 63043	\$24.80 29.20	662021 662041	\$29.50 34.10
M 14 🗶 11 1	6	12	19	66706	16.80	4.20	663062	35.20	662061	40.20
	8 10	12 12	22 26	66208 66210	20.00 22.90	4.40 4.80	662082 662102	39.20 43.40	662081 662101	44.20 48.60
	12	12	31	66213	29.30	5.30	662122	51.60	662131	57.00
	14	12	35	66214	32.90	5.70	662142	56.60	662141	62.00
<del>(全)</del>	16 18	12 12	38	66216	35.90	5.90	662163	60.30 81.00	662161 663181	65.70 84.50
' <b>T</b>	20	12	45 48	96218 66229	43.80 47.00	8.60 8.80	662182 662802	85.20	662201	89.00
. 1 . 1	23	12	51	66222	50.30	9.40	662222	90.50	663221	95.10
<b>□</b> •	24 26	12 12	54 57	66224 66226	53.40 56.70	9.60 10.10	962342 962363	94.50 99.90	662341 663361	99.50 105.70
11 1	28	12	60	66228	59.90	10.40	662282	104.00	662281	110.20
	30 33	12 12	64 67	66230 66232	63.00 66.20	10.90 11.50	667307 667377	109.10 114.40	662301 662321	116.30 122.60
T .	34	14	75	66234	93.60	15.40	662342	154.20	662341	164.60
No. 662					inife Swit		Fuse Con	nections		
	2	12	11	67202	\$11.20	\$ 3.40	672022	\$26.90	672021 672041	\$31.70 35.50
	4	12 12	14 20	6720 <u>4</u> 67206	14.20 · 18.20	3.60 4.20	672 <b>042</b> 672 <b>062</b>	30.60 36.60	072061	41.60
	8	12	23	67208	21.40	4.60	672082	41.20	672081	46.30
	10	12	26	67310	24.30	4.80	672103	44.80	672101	50.00
	12 14	12 12	33 36	67212	32.50	5.50 5.70	672122 672142	55.40 59.80	673131 672141	60.90 65.20
	16	12	39	67214 67316	36.10 39.10	6.10	672162	66.90	672161	69.70
<del>***</del>	18	12	47	67218	48.30	8.80	672183	86.50	672181	90.30
<b>T</b>	20	12	50	67220	51.50	9.10	672202	90.60 95.90	672201 672221	94 .80 100 .90
1 1	22 24	12 12	53 56	67223 <b>6</b> 7224	54.80 57.90	9.60 9.90	672222 672242	100.00	672341	105.30
	26	12	59	67226	61.20	10.40	672262	105.30	672261	111.50
1 4. ,	28 30	12 12	62 65	67228 67230	64 . 40 67 . 50	10.70 11.20	672282 672302	109.50 114.70	67 <b>22</b> 81 67 <b>230</b> 1	116.10 122.40
	32	12	68	67232	70.70	11.50	672322	118.90	672321	122.40 127.10
	34	14	77	67234	104.30	15.60	672342	166.10	672341	177.00
		Add K	Of		parriage onl	f blast	c anamalad	eléfo (	N I C N	

Add 5% to punels and barriers only for black enameled slate.
Add 25% to punels only for marble.
Add 100 to the riers only for marble.

Capacity 3 Amp.
Per Branch

125 V. Branches

# **(FA**)

## PANEL BOARDS. Type 6-3-Wire Mains

Base Finish Branches Fronts Black slate, oiled finish,  $\frac{7}{2}$  inch thick.

Main and branch bus bars polished and lacquered.

30 Amp. Knife Switches with D. P. Edison plug fuse connections.

2-P-6 Dead Black Paint Finish.

1-P-6 Unfinished straight sawed oak.

	2		e of nel	Catalog	List I	Prices	Cor Panel-Ba	rriers and	List Price Code Ga Boxes	s of uge Steel
I I	H	Wide	High	Number, Panel Only	Panel	Barriers	With All Stee	l Front	All Woo	1-P-6 d Front
	E	Wide	111gn		Only	Only	Cat. No.	List Price	Cat. No.	List Price
_	_	10		24900		Cable Lu		800.40		205 10
	2	$\frac{12}{12}$	8 11	64302 64304	\$ 6.20 9.30	\$ 3.00 3.40	643022 643 <b>0</b> 42	\$20.60 25.00	643021 643041	\$25.10 29.80
	8	12 12	14 17	64306 643 <b>0</b> 8	12.20 15.70	3.60 4.00	643062 643082	28.60 33.50	<b>043061</b> <b>6430</b> 81	33.50 38.50
1	LÖ	12	20	64310	19.00	4.20	643102	37.40	643101	42.40
	12 14	12 12	24 27	64312 64314	22.70 25.90	4.60 5.00	643122 643143	42.50	643131 643141	47.60
1	16	12	30	04316	<b>29</b> .30	5.20	643162	47.10 51.20	643161	52.30 56.50
	18 10	12 12	33 36	64318 64320	32.50 35.90	5.50 5.70	643187 643202	55.40 59.60	643181 643201	60.90 65.00
1	2	14	38	64322	40.60	6.00	. 643222	65.90	643221	71.30
	:4 :6	14 14	41 44	64324 64326	44.00 47.30	6.30 6.50	643242 643262	76.20 80.60	643241 643261	79.50 84.00
2	8	14	47	64328	50.50	6.90	643282	85.50	643281	89.60
	10 12	14 14	51 54	64336 64332	50.50 53.70 57.10	7.30 7.50	043302 648322	90.40 94.70	643301 643331	95.30 99.80
_2	14	14	58	64334	70.00	7.90	643342	109.50	643341	115.50
					Main I	Fuse Con	nections			
_	2	12	10	65302	\$ 8.50	\$ 3.20	653022	\$23.50	653021	\$28.20
	6	12 12	13 16	653 <b>6</b> 4 65 <b>36</b> 6	10.60 14.50	3.60 3.80	653 <b>04</b> 2 653062	27.00 31.50	653041 653061	31.90 36.50
1	8 10	12 12	19 22	<b>6530</b> 8 <b>65310</b>	18.00 21.30	4.20 4.40	653082 653102	36.40 40.50	<b>6530</b> 81 <b>6531</b> 01	41.40 45.50
	12	12	27	65312	25.40	5.00	653122	46.60	653131	51.80
	14 16	12 12	30 33	65314 65316	28.60 32.00	5.20 5.50	653142 <b>9</b> 53162	50.50 54.90	653141 65 <b>3</b> 161	55.80 60.40
1	18	12	36	65318	35.20	5.70	653182	<b>5</b> 8. <b>90</b>	653181	64.30
	:0 :2	12 14	39 45	65326 65323	38.60 44.70	6.10 6.70	653262 653222	66.40 78.80	653291 653221	69.20 82.60
1	4	14	48	65324	48.10	6.90	653242	83.10	653341	82.60 87.20
	: <b>6</b>	14 14	51 54	<b>65326</b> <b>6532</b> 8	51.40 54.60	7.30 7.50	653262 653282	88.10 92.20	653261 653281	93.00 97.30 103.30
1	10 12	14 14	54 57 60	65336 \$5332	57.80 61.20	7.90 8.10	653302 653322	92.20 97.30 101.60	653 <b>3</b> 01 653321	103.30 108.00
	4	14	66	65334	76.20	8.70	653342	119.60	653341	127.40
_						nife Swit				
	2	12 12	11 14	. 66302 66304	\$12.70 14.80	\$ 3.40 3.60	663022 663042	\$28.40 31.20	663031 663041	\$33.60 36.10
	6	12	17	66306	18.70	4.00	663062	36.50	663061	41.50
1	8 10	12 12	20 23	66308 66310	22.20 25.50	4.20 4.60	663082 663102	40.60 45.30	663081 663101	45.60 50.40
1	12	12	29	66312	30.50	5.20	663122	52.40	663131	55.70
	14	12 12	32 35	66314 66316	33.70 37.10	5.30 5.70	663142 663162	56.00 60.80	663141 663161	.61.40 66.20
1	8	12 12	38	66318 66320 .	40.30 43.70	5.90 6.20	663182 663262	64.70	663181	70.10
	) 0   2	14	41 47	66322	52.60	6.90	663222	75.00 87.60	663201 663221	78.10 91.70
1	14	14	50 53	66324	56.00	7.10	663342 663262	91.80	663241	91.70 96.30
	86 8	14 14	56	66326 66328	59.30 62.50 65.70	7.50 7.70	663282	96.90 101.10	663261 663281	102.00 106.60
	2	14 14	59 62	66330 66332	65.70 69.10	8.10 8.30	663302 663 <b>3</b> 22	106.10 110.60	663301 663321	112.50 117.40
	4	14	70	66334	85.20	11.80	663343	136.30	663341	145.40
_				Main I	inife Swit	ch with	Fuse Con	nections		
	2	12 12	12 15	67302 67304	\$14.80 16.90	\$ 3.40 3.80	673022 673042	\$30.50 33.90	673021 673041	\$35.30 38.90
•	4 6	12	18	67306	20.80	4.00	673062	38.60	673061	43.60
1	8 LG	12 12	21 24	67308 67310	24.30 27.60	4.40 4.60	673082 673103	43.50 47.40	673081 673101	48.50 52.50
1	13	12	30	67312	32.60	5.20	673122	54.50	673121	59.80
	14 16	12 12	33 36	67314 67316	35.80 39.20	5.50 5.70	673142 673162	58.70 62.90	673141 673161	64.20 68.30
1	18	12 12	39 · 42	67318	42.40 45.80	6.10 6.20	673182 673202	62.90 70.20 77.10	673181	73.00 80.20
	:6 :2	12 14	49	67320 67322	57.40	7.10	673222	93.20	673201 673221	97.70
2	4	14	52	67324	60.80	7.30 7.70	673242	97.50 102.70	673241	102.40 108.20
2	8	14 14	55 58	67326 67328	64 . 10 67 . 30	7.90	673262 673282	106.80	673261 673281	112.80
3	10 12	14 14	61 64	67330 67332	70.50 73.90	8.30 8.50	673362 67 <b>332</b> 2	112.00 116.30	673301 673321	118.80 123.70

67334

92.50

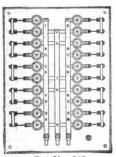
Add 5% to panels and barriers only for black enameled slate. Add 25% to panels only for marble.

Add 166% to barriers only for marble.

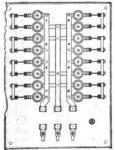
12.00

678342

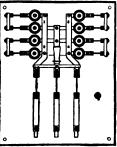
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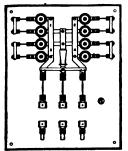
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Cut No. 653



Cut No. 663



Cut No. 673

Capacity 6 Amp. Per Branch

125 V. Branches



## PANEL BOARDS. Type 7-2-Wire Mains

Fronts

Black state, oiled finish, 1/2 inch thick.

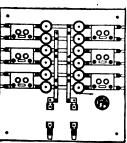
Main and branch bus bars, polished and lacquered.

10 Amp. D. P. Push Button Switches with D. P. Edison plug fuse con's.

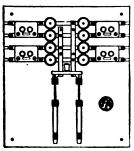
2-7-6 Dead Black Paint Finish.

1-P-6 Unfinished straight sawed oak.

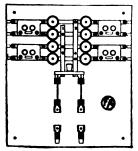
			(FA)
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00	8.	-8	00
00	8	-8	00
00	-O-		00



Cut No. 752



Out No. 763



Cut No. 773

B	Siz	e of		List P	Prices	Combination List Prices of Panel-Barriers and Cede Gauge 8				
A N C		nel	Catalog Number,	1486 1	Hoes	L	Gutter	Boxes		
H			Panel Only	Panel	Barriers	With All Stee	2-P-6 l Front	With All Woo		
e	Wide	High		Only	Only	Cat. No.	List Price	Cat. No.	List Price	
	•			Main (	Cable Lug	s Only	·	·		
2	14	6	74202 74204	\$ 7.50 12.50	\$3.10	742022 742042	\$22.50	742021 742041	\$26.90	
6	14 14	9 13	74206	12.50 17.60	3.30 3.70	742062	28.20 34.70	742061	32.70 39.40	
8 10	14 14	16 19	74208 74210	22.80 27.70	3.90 4.30	742083 742102	40.50 46.70	743061 742101	45.30 51.70	
12	14	22	74212	<b>33</b> .30	4.50	742122	52.90	742121	57.90	
14 16	14 14	25 28	74214 74216	38.90 43.90	4.90 5.10	742142 742162	59.90 65.60	742141 742161	65.20 71.00	
18	14	32	74218	50.60	5.40	742182	73.70	742181	79.20	
20 22 .	14 14	35 38	74220 74222	55.80 61.10	5.80 6.00	742203 742223	80.30 83.40	74 <b>770</b> 1 74 <b>727</b> 1	85.80 91.80	
24 26	14 14	40 43	74224 74226	66.20 71.50	6.20 6.50	742243 742263	94.70 104.80	743241 74 <b>230</b> 1	97.70 108.20	
28 30	14 14	46 49	74228 74230	76.70 81.80	6.70 7.10	742282 742302	110.80 117.60	742281 7 <b>42301</b>	114.60 122.10	
32	14	<b>52</b>	74232	87.00	7.30	742322	123.70	742321	128.60	
31	16	56	74234	125.80	7.90	742342	166.10	742341	171.80	
2	14	9	75202	<b>Main F</b> \$ 9.00	<b>use Conn</b> \$3.30	752022	\$24.70	752021	\$29.20	
4	14	12	75204	14.00	3.50	752012	30.40	752041	35.00	
<b>6</b> 8	14 14	17 20	75 <b>206</b> 75 <b>20</b> 8	19.40 24.60	4.10 4.30	75 <b>2062</b> 75 <b>20</b> 62	37.70 43.60	7 <b>5206</b> 1 7 <b>430</b> 61	42.60 48.60	
10	14	22	75210	29.50	4.50	752102	49.10	752101	54.10	
12 14	14 14	29 32	75212 75214	36.00 41.60	5.30 5.40	752122 752142	58.50 64.70	75 <b>3</b> 121 75 <b>2</b> 141	63.90 70.20	
1 <b>6</b> 18	14 14	35 40	75216 75218	46.60	5.80 6.20	752162 752183	71.10 83.40	75 <b>3161</b> 7 <b>521</b> 81	76.60 86.40	
20	14	43	75220	54.90 60.10	6.50	752202	93.40	752201	96.80	
22 24	14 14	46 49	75222 75224	65.40 70.50	6.70 7.10	752222 752243	99.50 106.30	752221 752341	103.30 110.80	
<b>26</b> 28	14 14	52 55	7 <b>5226</b> 7 <b>522</b> 8	75.80 81.00	7.30 7.70	75 <b>2263</b> 752282	112.50 119.60	752261 752281	117.40 125.10	
30 32	14	57 60	75230 75 <b>23</b> 2	86.10 91.30	7.90 8.10	752 <b>30</b> 2 752 <b>32</b> 2	125.60 131.70	752 <b>30</b> 1 752 <b>3</b> 21	131.60 138.10	
34	14 16	69	75 <b>23</b> 4	135.70	10.20	752342	184.60	752341	193.70	
				Main K	nife Swit	ch Only				
2	14 14	10 13	76202 76204	\$11.80 16.80	\$3.30 3.70	762022 762042	\$27.50 33.90	7 <b>6202</b> 1 7 <b>6204</b> 1	\$32.00 38.60	
6	14	19	7 <b>6206</b> 7 <b>620</b> 8	22.80	4.30	767067 762082	41.80	762061 762061	46.80	
8 10	14 14	22 25	76208 76210	28.00 32.90	4.50 4.90	762162 762162	47.60 53.90	762101	52.60 59.20	
12	14	31	76212	41.30	5.40	762122 762142	64.40 70.70	7 <b>6</b> 2121 7 <b>6</b> 2141	69.90 76.20	
14 16	14 14	33 36	76214 7 <b>6</b> 216	46.90 51.90	5.60 5.80	762162	76.40	763161	81.90	
18	14 14	44 47	7 <b>62</b> 18 7 <b>6220</b> .	61.80 67.00	8.50 9.00	762182 762 <del>20</del> 2	99.20 106.30	7 <b>62</b> 181 7 <b>6620</b> 1	102.60 110.50	
20 22	14	50	76222	72.30	9.20	762223	112.60	762221 762341	117.10 123.50	
24 26	14 14	52 55	76224 76226	77.40 82.70	9.50 10.00	762243 762362	118.60 126.20	763361	131.70	
<b>28</b> <b>30</b>	14 14	58 61	7 <b>622</b> 8 7 <b>6230</b>	87.90 93.00	10.30 10.80	762282 762302	132.40 139.80	7 <b>623</b> 81 7 <b>6230</b> 1	138.40 146.60	
82	14	64	76232	98.20	11.10	762823	146.10	7 <b>623</b> 21 7 <b>623</b> 41	153.50 215.00	
84	16	72	76234	145.00 Knife Swit	15.20	762342 France Cor	205.40	104011		
2	14	11	77202	\$13.20	\$3.50	772023	\$29.60	772021	\$34.20	
4	14 14	14 19	77 <del>204</del> 77 <del>206</del>	18.20 24.20	3.70 4.30	772012	35.30 43.20	772041 772041	40.00 48.20	
.8	14	22	77208	29.40	4.50	77 <b>2062</b> 77 <b>20</b> 62	49.00 55.30	772061 772101	54.00 60.60	
10 12	14 14	25 32	77210 77212	34.30 44.50	4.90 5.40	7721 <b>02</b> 772122	67.60	772121	73.10	
14 16	14 14	35 38	77214 77216	50.10 55.10	5.80 6.00	772143 772163	74.60 80.40	772141 77 <del>2</del> 161	80.10 85.80	
18	14	45	77218		8.70	772182	104.60	772181	108.40	
20 22	14 14	48 51	77220 77222	66.30 71.50 76.80	9.00 9.50	772202 77 <del>222</del> 2	110.80 118.10	77 <b>2201</b> 77 <b>2221</b>	114 .90 123 .00	
24 26	14 14	54 57	77224	81.90 87.20	9.80 10.30	772242 772262	124.20 131.70	772341 778361	129 <b>30</b> 137 <b>7</b> 0	
28	14	60	77 <b>226</b> 77 <b>22</b> 8	92.40	10.50	114492	138.00	77 <b>72</b> 81 7 <b>7230</b> 1	144 .40 152 .80	
30 32	14 14	63 66	77 <b>230</b> 77 <b>23</b> 3	97.50 102.70	11.10 11.40	77 <b>2302</b> 77 <b>2322</b>	145.40 151.70	772321	159 60	
34	16	74	77234	155.70	15.50	772342	217.40	772341	227 40	
	Add 8	% to p	ancis and panels only	barriers only for marble	y ior black	enameled	1 <del>00</del> 081	lC .		

Add 25% to panels only for marble. Add 10.% to barriers only for marble.

Capacity 3 Amp. Per Branch

### 12



## PANEL BOARDS. Type 7-3-Wire Mains

Base Finish Fronts Black slate, oiled finish, 1/4 inch thick.
Main and branch bus bars polished and lacquered.
10 Amp. D. P. Push Botton Switches with D. P. Edison plug fuse connections.
2-P-6 Dead Black Paint Finish.
1-P-6 Unfinished straight sawed oak.

Per Branch							. ———			
er Branch	R A N C H		e of nel	Catalog Number,	List I	Prices	Panel-Ba		List Price Code Ga Boxes	s of uge Steel
25 V. Branches	Ë			Panel Only	Panel	Barriers		2-P-6 el Front		1-P-6 od Front
	S	Wide	High	<u> </u>	Only	Only	Cat. No.	List Price	Cat. No.	List Price
						Cable Lu				
	2	14 14	7 10	743 <b>0</b> 2 743 <b>0</b> 4	\$ 8.20 13.30	\$3.10 3.30	74 <b>39</b> 22 74 <b>39</b> 42	\$23.20 29.00	743021 743041	\$27.60 33.50
	<b>6</b> 8	14 14	13 16	74 <b>306</b> 7 <b>430</b> 6	18.20 23.70	3.70 3.90	74 <b>396</b> 7 74 <b>38</b> 82	35.30 41.40	743061 743061	40.00 46.20
	10	14	19	74310	29.00	4.30	743102	48.00	743101	53.00
X	12 14	14 14	23 26	74312 74314	34.70 39.90	4.70 4.90	743122 743142	55.00 60.90	743121 742141	60.10 66.20
	16 18	14 14	29 31	74316 74318	45.30 50.50	5.30 5.40	7 <b>4316</b> 2 7 <b>43</b> 182	67.80 73.60	743161 743181	73.20 79.10
, , , , , , , , , , , , , , , , , , ,	20	14	34	74320	55.90	5.60	743202	<b>79.70</b>	743201	85.20
O O O O O O O O O O O O O O O O O O O	22 24	16 16	37 39	74 <b>3</b> 22 74324	62.60 68.00	6.10 6.30	743222 743242	88.80 97.30	743221 743241	94.20 100.50
	<b>26</b> <b>28</b>	16 16	42 45	74326 74328	73.30 78.50	6.50 6.90	7 <b>4326</b> 2 7 <b>432</b> 82	106.70 113.90	743261 743281	110.20 118.00
(A)	30 32	16 16	48 51	74330 74332	83.70 89.10	7.10 7.50	743362 743322	120.10 127.40	743301 743321	124 · 50 132 · 40
	34	16	55	74334	104.50	7.90	743342	144.80	743341	150.50
Cut No. 743					Main F	use Conn	ections			
0	2	14	10 13	75302 75304	\$10.50 14.60	\$3.30 3.70	753022 753042	\$26.20 31.70	753021 753041	\$30.70 36.40
ON FOR	4	14 14	15	75306	20.50	3.90	753962	38.20	753061 753061	43.00
00000	8 10	14 14	18 21	7 <b>530</b> 8 7 <b>5310</b>	26.00 31.30	4.10 4.50	7 <b>530</b> 82 7 <b>53</b> 102	44.30 50.90	753051 753101	49.20 55.90
8.00	12	14	26	75312	37.40	4.90 5.30	753122 753142	58.40 65.10	753121 753141	63.70 70.50
X	14 16	14 14	29 32	75314 75316	42.60 48.00	5.40	753162	71.10	753161	76.60
	18 20	14 14	35 38	7 <b>531</b> 8 7 <b>5320</b>	53.20 58.60	5.80 6.00	753182 753202	77.70 83.90	7 <b>531</b> 81 7 <b>5320</b> 1	83.20 89.30
	22	16	43	75322 75324	66.70 72.10	6.70 6.90	7 <b>58222</b> 7 <b>5824</b> 2	101 . 10 107 . 50	758221 758241	104.90 111.60
	24 26	16 16	46 49	75326	77.40	7.30	753262	114.70	753261	119.40
6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	26 28 30 32	16 16	52 55	7 <b>532</b> 8 7 <b>5330</b>	82.60 87.80	7.50 7.90	7 <b>532</b> 82 7 <b>5330</b> 2	120.90 128.10	753281 753301	125.90 133.80
	32 34	16 16	58 63	75332 75334	93.20 110.70	8.10 8.70	7 <b>533</b> 22 7 <b>533</b> 42	134.30 154.80	753321 753341	140.40 162.20
Cut No. 753			(6)	7 0001		nife Swit		101.00		102.20
	2	14	11	76302	\$14.70	\$3.50	763022	\$31.10	763021	\$35.70
	4 6	14 14	14 17	7 <b>6394</b> 7 <b>63</b> 06	18.80 24.70	3.70 4.10	7 <b>636</b> 42 7 <b>636</b> 62	35.90 43.00	7 <b>6304</b> 1 7 <b>6306</b> 1	40.60 47.90
No.	8 10	14 14	20 23	7 <b>630</b> 8 7 <b>63</b> 10	30.20 35.50	4.30 4.70	763082 763192	49.20 55.≿0	763081 763101	54.20 60.90
	12	14	28	76312	42.50	5.10	763122	64.20	763121	69.60
	14 16	14 14	31 34	7 <b>63</b> 14 7 <b>63</b> 16	47.70 53.10	5.40 5.60	763142 763162	70.80 76.90	763141 763161	76.30 82.40
	18 <b>20</b>	14 14	37 40	7 <b>63</b> 18 7 <b>63</b> 20	58.30 63.70	6.00 6.20	763182 763202	83.60 92.20	763181 7 <b>6320</b> 1	89.00 95.20
	22	16	45	76322	74.60	6.90	763222	110.00	763221	114.10 120.80
***	24 26 28	16 16	48 51	7 <b>6324</b> 7 <b>63</b> 26	80.00 85.30	7.10 7.50	7 <b>6324</b> 2 7 <b>6326</b> 2	116.40 123.60	7 <b>63</b> 241 7 <b>63</b> 261	128.60
	28 30	16 16	54 57	7 <b>63</b> 28 7 <b>63</b> 30	90.50 95.70	7.70 8.10	763282 763302	129.80 136.80	763281 763391	135.20 142.90
	32	16	60	76332	101 . 10	8.30	763322	143.20	7 <b>633</b> 21 7 <b>633</b> 41	149.60 180.20
Cut No. 763	34	16	67	76334	119.70	11.80	763342	171.60	109311	160.20
	2	14	11	77302	Knife Swit	\$3.50	773023	\$33.20	773021	\$37.80
TOP OF COME	4	14 14	15 17	77304 77306	20.90 26.80	3.90 4.10	773042 773062	38.60 45.10	773 <b>04</b> 1 77 <b>306</b> 1	43.40 50.00
	. 8	14	20	77308	32.30	4.30	773082 773102	51.30 57.90	773081 773101	56.30 63.00
	10	14 14	23 29	77810 77812	37.60 44.60	4.7Q 5.30	773122	67 10	773121	72.50
	14 16	14 14	32 34	77314 77316	49.80 55.20	5.40 5.60	773142 7731 <b>6</b> 2	72.90 79.00 85.70 94.30	773141 773161	78.40 84.50
	18	14	37	77318	60.40	6.00	773182 773292	85.70 04.30	778181 773201	91.10 97.30
	20 22	14 16	40 47	7 <b>7320</b> 7 <b>73</b> 22	65.80 79.40	6.20 7.10	778222	115.80	778221	120.20
	94	16 16	50 53	77324 77326	84.80 90.10	7.30 7.70	77 <b>324</b> 2 77 <b>826</b> 2	122.10 129.40	773241 773261	126.80 134.80
	26 28 30	16	56	77 <b>32</b> 8 7 <b>7330</b>	95.30 100.50	7.90 8.10	773282 77 <b>330</b> 2	135.60 141.60	778281 773301	141.30 147.70
000	30 32	16 16	58 61	77332	105.90	8.50	773322	149.10	778321	156.00
999	34	16	68	77334	127 00	11.80	773342	178.90	773341	187.50

Cut No. 773

16

68

77334

Add 5% to panels and barriers only for black enameled slate.
Add 25% to panels only for marble.

Add 100% to barriers only for marble.

11.80

127.00

773342

178.90

Capacity 6 Amp. Per Branch

## (A) PANEL BOARDS. Type 8-2-Wire Mains

Finish Branches Fronts

Black slate, oiled finish, 1/2 inch thick.

Main and branch bus bars polished and lacquered.

10 Amp. D. P. Ind. Snap Switches with D. P. Edison plug fuse connections.

2-P-6 Dead Black Paint Finish.

1-P-6 Unfinished straight sawed oak.

Per Branch	-				imoneu ou	argaro da n co	- CUA.			
	B RANCHES		e of nel	Catalog Number,	List I	Prices	Cor Panel-Ba	mbination arriers and Gutter	Code Ga Boxes	uge Steel
125 V. Branches	Ë		I	Panel Only	Panel	Barriers		2-P-6 el Front		1-P-6 od Front
	S	Wide	High		Only	Only	Cat. No.	List Price	Cat. No.	List Price
					Main	Cable Lu	gs Only			
° ~ ~ ~ °	2	12 12	6	84202 84204	\$ 7.10 11.70	\$ 3.00 3.20	842023 842043	\$21.50 26.70	842031 842041	\$26.00 31.40
	•	12	13	84206	16.40	3.60	842062	32.80	842061	37.70
	8 10	12 12	16 19	84208 84210	21.20 25.70	3.80 4.20	842082 842102	38.20 44.10	842081 842101	43.20 49.10
	12	12	22	84313	30.90	4.40	843132	50.10	847171	55.10
	14 16	12 12	25 28	84714 84716	36.10 40.70	4.80 5.00	842142 842163	56.60 61.90	847141 847161	61.80 67.10
	18	12 12	32	84218	47.00	5.30	842182	69.30	843181	74:.70
	20 22	12	35 38	842 <b>20</b> 84222	51.80 56.70	5.70 5.90	842222 842222	75.50 81.10	843301 843231	80.90 86.50
	24 26	12 12	40 43	842 <b>24</b> 842 <b>36</b>	61.40 66.30	6.10 6.40	843343 843363	89.20 98.50	84 <b>334</b> 1 84 <b>326</b> 1	92.00 101.70
	28 30	12 12	46 49	84228 84230	71.10 75.80	6.60 7.00	843383 843303	104.20 110.60	842281 843301	107.70 114.80
· • • • •	33	12	52	84232	80.60	7.20	842322	116.30	842321	120.90
Cut No. 842	34	14	56	84334	101.70	7.70	847847	140.30	842341	145.80
	- 3	12	9	85262	Main Fu \$ 8.60	se Conne		\$23.60	552021	\$28.30
	ĩ	12	12	85204	13.20	\$ 3.20 3.40	8 <b>52022</b> 8 <b>52042</b>	28.90	852041	33.70
	6 8	12 12	17 20	85 <b>206</b> 8 <b>520</b> 8	18.20 23.00	4.00 4.20	85 <b>296</b> 2 85 <b>29</b> 82	36.00 41.40	8 <b>5206</b> 1 8 <b>520</b> 81	41.00 46.40
	10	12	22	85210	27.50	4.40	852102	46.70	857101	51.70
	12 14	12 12	29 32	85212 85214	33.60 38.80	5.20 5.30	85 <b>3132</b> 8 <b>53142</b>	55.50 61.10	852121 852141	60.80 66.50
	16	, <b>12</b>	35	85216	43.40	5.70	852162	67.10	852161	72.50
	18 20	12 12	40 43	85218 85 <b>220</b>	51.30 56.10	6.10 6.40	85 <b>31</b> 83 8 <b>53263</b>	79.10 88.30	852181 852201	81.90 91.50
	22 24	12 12	46 49	85227	61.00 65.70	6.60	852222	94.10	852221	97.60 104.70
	26	12	52	8 <b>5224</b> 8 <b>5226</b>	70.60	7.00 7.20	85 <b>7747</b> 85 <b>7762</b>	100.50 106.30	852241 852261	110.90
/ <b>G G</b>	38 30	12 12	55 57	85228 852 <b>30</b>	75.40 80.10	7.60 7.80	852282 852302	112.80 118.40	8 <b>522</b> 81 8 <b>5236</b> 1	118.10 124.20
	32 34	12 14	60 69	85232	84.90	8.00	852322	124.00	857371	130.20 167.90
Out No. 853	-01		08	85234	111.60	10.00 Enife Swit	852342	158.80	852341	107.80
	2	12	10	86202	\$11.40	\$ 3.20	863022	\$26.40	862021	\$31.10
·	4	12 12	13 19	86201 86206	16.00 21.60	3.60 4.20	862042 862062	32.40 40.00	8 <b>67041</b> 8 <b>6706</b> 1	37.30 45.00
	8	12	22	86208	26.40	4.40	867082	45.60	862081	50.60
	10 12	12 12	25 31	86210 86212	30.90 38.90	4.80 5.30	862102 862122	51.40 61.20	863101 863131	56.60 66.60
	14 16	12 12	33 36	86214 86216	44.10 48.70	5.50 5.70	862142 8621 <b>63</b>	67.00 72.40	862141 862161	72.50 77.80
	18	12	44	86718	58.20	8.30	862182	94.30	887181	97.50
T T _ 1	20 22	12 12	47 50	86 <b>720</b> 86 <b>72</b> 3	63.00 67.90	8.80 9.10	862222 862222	101.20 107.00	8 <b>6220</b> 1 8 <b>6232</b> 1	105.00 111.20
<b>↑ ↑ Ø</b>	24 26	12 12	52	86224 86226	72.60 77.50	9.40	862242 862262	112.80 119.60	862241 862261	117.40 124.90
11 11 1	28	12	55 58	86228	82.30	9.90 10.10	862282	125.50	862281	131.30
• 0 0 •	30 32	12 12	61 64	8 <b>6230</b> 8 <b>6232</b>	87.00 91.80	10.70 10.90	862 <b>302</b> 862322	132.10 137.90	8 <b>62301</b> 8 <b>62331</b>	138.70 145.10
Cut No. 863	34	14	72	86234	120.90	14.70	862342	179.00	862341	188.50
					nife Switc					<b>6</b> 22 20
	2	12 12	11 14	872 <b>02</b> 87 <b>204</b>	\$12.80 17.40	\$ 3.40 3.60	87 <b>2022</b> 8 <b>72042</b>	\$28.50 33.80	872021 872041	\$33.30 38.70
	6	12	19	87206	23.00	4.20	87 <b>2062</b> 87 <b>20</b> 82	41.40	87 <b>2061</b> 87 <b>20</b> 81	46.40 52.00
	8 10	$\frac{12}{12}$ .	22 25	87 <b>30</b> 8 87 <b>210</b>	27.80 32.30	4.40 4.80	872102	47.00 52.80	872101	58.00
	12 14	12 12	32 35	87 <b>212</b> 87 <b>214</b>	42.10 47.30	5.30 5.70	872122 872143	64.40 71.00	87 <b>3131</b> 873141	69.80 76.40
	16	12	38	87216	51.90	5.90	872162	76.30	872161	81. <b>70</b>
	18 <b>20</b>	12 12	45 48	87218 87220	62.70 67.50	8.60 8.80	87 <b>3183</b> 87 <b>3303</b>	99.90 105.70	872181 872201	103.40 109.50
ŢŢ	22	12 12	51	87222	72.40 77.10	9.40	872222	112.60 118.20	87 <b>2321</b> 87 <b>2341</b>	117.20 123.20
	24 26	12	54 57	87 <b>234</b> 87 <b>226</b>	82.00	9.60 10.10	87 <b>2242</b> 87 <b>2362</b>	125.20	872261	131.00
/	28 30	12 12	60 63	87228 87230	86.80 91.50	10.40 10.90	872282 872 <b>36</b> 2	130.90 137.60	87 <b>3381</b> 87 <b>330</b> 1	137.10 144.80
	32	12	66	87232 87234	96.30 131.60	11.20	872323	143.50 191.00	87 <b>333</b> 1 87 <b>334</b> 1	151.20 200.90
	34	14	74	D1434	131.00	15.00	873343	191.00	J 7 4 4 4 4	

Cat No. 872

131.60 Add 5% to panels and barriers only for black enameled slate.
Add 25% to panels only for marblezed by
Add 106% to barriers only for marble.

843321 843341

141.20

125 V. Mains

Capacity 3 Amp. Per Branch

125 V. Branches



## PANEL BOARDS. Type 8-3-Wire Mains

Base Finish Branches

97 10

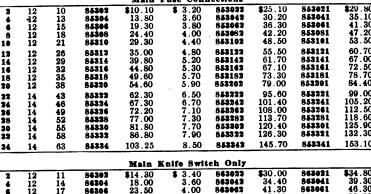
Black slate, oiled finish, 3/2 inch thick.
Main and branch bus bars polished and lacquered.
10 Amp. D. P. Ind. Snap Switches with D. P. Edison plug fuse connections.
2-P-6 Dead Black Paint Finish.
1-P-6 Unfinished straight sawed oak.

843343

135 70

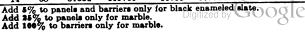
BRANCHES		e of .	Catalog Number,	List I	Prices	Combination List Prices of Panel-Barriers and Code Gauge Steel Gutter Boxes				
Ĉ			Panel Only	Panel	Barriers	With All Stee	2-P-6 l Front	With 1-P-6 All Wood Front		
E 8	Wide	High		Only	Only	Cat. No.	List Price	Cat. No.	List Price	
				Main C	able Lug	Only				
2 4 6 8 10 12 14	12 12 12 12 12 12 12	7 10 13 16 19 23 26	84302 84304 84306 84308 84310 84312 84314 84316	\$ 7.80 12.50 17.00 22.10 27.00 32.30 37.10 42.10	\$ 3.00 3.20 3.60 3.80 4.20 4.60 4.80 5.20	843022 843042 843062 843082 843102 843122 843142 843142	\$22.20 27.50 33.40 39.10 45.40 52.10 57.60 64.00	843021 843041 843061 843081 843101 843121 843141 843161	\$26.70 32.20 38.30 44.10 50.40 57.20 62.80 69.30	
16 18 20 22 24 26 28	12 12 12 14 14 14 14	29 31 34 37 39 42 45	84318 84320 84322 84324 84324 84326 84328	46.90 51.90 58.20 63.20 68.10 72.90	5.30 5.50 6.00 6.20 6.30 6.70	843187 843202 843223 843242 843242 843262	69.20 74.80 83.50 91.70 100.30 107.00	843181 843201 843271 843241 843261 843281	74.60 80.30 88.90 94.70 103.60 110.80	
30 32	14 14	48 51	84330 84332	77.70 82.70	6.90 7.30	843393 843323	112.70 119.40	843301 843321	116.80 124.30	

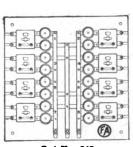
34	14	- 33	02002	87.10	. 7.70	GEGGEN	100.10	OROURA	
				Main	Fuse Cont	ections			
2	12	10	85307	\$10.10	\$ 3.20	853022	\$25.10	853021	\$29.80
4	42	13	85304	13.80	3.60	853047	30.20	853041	35.10
ē	12	15	85306	19.30	3.80	853067	36.30	8 <b>53061</b>	41.30
8	12	18	84308	24.40	4.00	853083	42.20	853081	47.20
10	12	21	85310	29.30	4.40	853102	48.50	853101	<b>53</b> . <b>5</b> 0
13	12	26	85312	35.00	4.80	853122	55.50	853121	60.70
14	12	29	85314	39.80	5.20	853142	61.70	853141	67. <b>0</b> 0
16	12	32	85316	44.80	5.30	853162	67.10	853161	72.50
18	12	35	85318	49.60	5.70	853182	73.30	853181	78.70
20	12	38	85320	54.60	5.90	853202	79.00	853201	84.40
22	14	43	85322	62.30	6.50	853222	95.60	853221	99.00
34	14	46	85324	67.30	6.70	853242	101.40	853241	105.20
36	14	49	85326	72.20	7.10	858262	108.00	853261	112.50
		52	85328	77.00	7.30	853282	113.70	853281	118.60
38	14			81.80	7.70	853302	120.40	853301	125.90
30	14	55	85330		7.90	843322	126.30	853321	132.30
33	14	58	85332	86.80					
34	14	63	85334	103.25	8.50	853347	145.70	853341	153.10



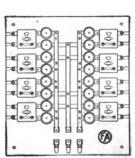
4 12 14 86304 18.00 3.60 863042 34.40 863061 6 12 17 86306 23.50 4.00 863062 41.30 863061 8 12 20 86306 28.60 4.20 863062 47.00 863061 10 12 23 86310 33.50 4.60 883102 53.30 863101 12 12 28 86312 40.10 5.00 863122 61.30 863101 14 12 31 86314 44.90 5.30 863122 67.20 863121 16 12 34 86316 49.90 5.50 863162 67.20 863161 16 12 37 86318 54.70 5.90 863182 79.10 863181 30 863121 12 12 40 86320 59.70 6.10 863203 87.50 863301 22 14 45 86322 70.20 6.70 863222 104.20 863221 24 48 86324 75.20 6.70 863222 104.20 863241	
2 12 11 86307 \$14.30 \$ 3.40 863022 \$30.00 863021 4 12 14 86304 18.00 3.60 863042 34.40 863041 6 12 17 86306 23.50 4.00 863062 41.30 863061 8 12 20 86308 28.60 4.20 86308 47.00 863061 10 12 23 86310 33.50 4.60 883103 53.30 863101 12 28 86312 40.10 5.00 863132 61.30 863101 12 12 28 86312 40.10 5.00 863132 61.30 863121 14 12 31 86314 44.90 5.30 863142 67.20 863141 16 12 34 86316 49.90 5.50 863162 72.80 863161 18 12 37 86318 54.70 5.90 863182 79.10 863181 20 12 40 86320 50.70 6.10 863303 87.50 863301 22 14 45 86327 70.20 6.70 863322 104.30 863221 23 14 45 86327 70.20 6.70 863222 104.30 863221 24 14 48 86324 75.20 8.90 863242 110.20 863241	
4 12 14 86304 18.00 3.60 863042 34.40 863061 6 12 17 86306 23.50 4.00 863062 41.30 863061 8 12 20 86306 28.60 4.20 863062 47.00 863061 10 12 23 86310 33.50 4.60 883102 53.30 863101 12 12 28 86312 40.10 5.00 863122 61.30 863101 14 12 31 86314 44.90 5.30 863122 67.20 863121 16 12 34 86316 49.90 5.50 863162 67.20 863161 16 12 37 86318 54.70 5.90 863182 79.10 863181 30 863121 12 12 40 86320 59.70 6.10 863203 87.50 863301 22 14 45 86322 70.20 6.70 863222 104.20 863221 24 48 86324 75.20 6.70 863222 104.20 863241	34.80
6 12 17 86306 23.50 4.00 863062 41.30 863061 8 12 20 86308 28.60 4.20 863062 47.00 863081 10 12 23 86310 33.50 4.60 853102 53.30 863101 13 12 28 86313 40.10 5.00 863123 61.30 863101 14 12 31 86314 44.90 5.30 863142 67.20 863141 16 12 34 86316 49.90 5.50 863162 72.80 863161 18 12 37 86318 54.70 5.90 863182 79.10 863181 20 12 40 86320 59.70 6.10 863203 87.50 863201 22 14 45 86323 70.20 6.70 863222 104.30 863221 23 14 45 86323 70.20 6.90 863242 110.20 863241 14 48 86324 75.20 6.90 863242 110.20 863241	39.30
8 12 20 86386 28.60 4.20 863863 47.00 863861 18 12 23 86318 33.50 4.60 883183 53.30 8638181 12 12 28 86312 40.10 5.00 863123 61.30 863121 14 12 31 86314 44.90 5.30 863142 67.20 863141 16 12 34 86316 49.90 5.50 863162 72.80 863161 18 12 37 86318 54.70 5.90 863182 72.10 863181 20 12 40 86320 50.70 6.10 863203 87.50 863381 22 14 45 86327 70.20 6.70 863223 104.30 863221 23 14 45 86327 70.20 6.70 863223 104.30 863221 24 14 48 86324 75.20 6.70 863222 114.20 863241	46.30
18 12 28 86312 40.10 5.00 863127 67.20 863121 14 12 31 86314 44.90 5.30 863142 67.20 863141 16 12 34 86316 49.90 5.50 863167 72.80 863161 18 12 37 86318 54.70 5.90 863167 79.10 863181 28 12 40 86320 59.70 6.10 863203 87.50 863201 23 14 45 86327 70.20 6.70 863222 104.30 863221 23 14 48 86324 75.20 6.90 863242 110.20 863241	52.00
12 12 28 86312 40.10 5.00 863122 61.30 863121 14 12 31 86314 44.90 5.30 863142 67.20 863141 16 12 34 86316 49.90 5.50 863162 72.80 863161 18 12 37 86318 54.70 5.90 863162 79.10 863181 29 12 40 86320 59.70 6.10 863202 87.50 863261 22 14 45 86322 70.20 6.70 863222 104.30 863221 22 14 48 86324 75.20 6.90 863242 110.20 863241 24 14 48 86324 75.20 6.90 863242 110.20 863241	58.40
14 12 31 86814 44.90 5.30 863142 67.20 863161 16 12 34 86816 49.90 5.50 863167 72.80 863161 18 12 37 86318 54.70 5.90 863187 79.10 863181 28 12 40 86320 59.70 6.10 863207 87.50 863201 27 14 45 86327 70.20 6.70 86327 104.30 86327 74 14 48 86324 75.20 6.90 863262 110.20 863241	66.50
16         12         34         86316         49.90         5.50         863162         72.80         863161           18         12         37         86318         54.70         5.90         863187         79.10         863181           28         12         40         86329         59.70         6.10         863203         87.50         863201           23         14         45         863237         70.20         6.70         863223         104.30         863221           24         14         48         86324         75.20         6.90         863243         110.20         863241	72.60
18 12 37 86318 54.70 5.90 863182 79.10 853181 20 12 40 86320 55.70 6.10 863207 87.50 863201 22 14 45 86327 70.20 6.70 863222 104.30 863221 24 14 48 86324 75.20 8.90 863242 110.20 863241	78.30
28     12     40     86320     59.70     6.10     863203     87.50     863201       22     14     45     86322     70.20     6.70     863223     104.30     863231       24     14     48     86324     75.20     6.90     863243     110.20     863241	84.50
22 14 45 86322 70.20 6.70 863222 104.30 863221 24 14 48 86324 75.20 6.90 863242 110.20 863241	90.30
34 14 48 86324 75.20 6.90 863242 110.20 863241	08.10
A 14 10 000 00000 110 00 000001	14.30
	21.70
36     14     51     86336     80.10     7.30     863363     116.80     863261       38     14     54     86338     84.90     7.50     863383     122.50     863381	27.60
30 14 57 86330 89.70 7.90 863303 129.20 863301	35.20
32 14 60 86332 94.70 8.10 863322 135.10 863321	41.50
	70.80

32	14	60	86332	94.70	8.10	863377	135.10	863371	141.50
84	14	67	86334	112.30	11.60	863347	162.30	863341	170.80
			fain Kni	fe Switch	with Fus	e Conne	etions		
3	12 12	11 15	87302 87304	\$16.40 20.10	\$ 3.40 3.80	873022 873042	\$32.10 37.10	873021 873041	\$36.90 42.10
6	12 12 12	17 20	87306 87308	25.60 30.70	4.00	873 <b>06</b> 2 873082	43.40 49.10	87 <b>3061</b> 87 <b>3081</b>	48.40 54.10
10	12	23	87310	35.60 42.20	4.60 5.20	873107 873122	55.40 64.10	873101 873121	60.50 69.40
13 14	12 12	29 32	87812 87314 87316	42.20 47.00 52.00	5.20 5.30 5.50	873142 873162	69.30 74.90	873141 873161	74.70 80.40
16 18 <b>20</b>	12 12 12	34 87 40	87318 87320	56.80 61.80	5.90 6.10	873182 873203	81.20 89.60	873181 873201	86.60 92.40
22 24	14 14	47 50	87 <b>373</b> 87 <b>324</b>	75.00 80.00	6.90 7.10	873222 873243	110.00 115.80	873221 873241	114.10 120.30
26 28	14 14	53 56	87326 87328	84.90 89.70	7.50 7.70	873263 873283	122.50 128.30	873261 873281	127.60 133.80
30 32	14 14	58 61	87330 87337	94.50 99.50	7.90 8.30	873393 873323	134.00 141.00	87 <b>3301</b> 87 <b>3321</b>	140.00 147.80
34	14	68	87334	119.60	11.60	873343	169.60	873341	178.10

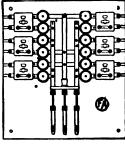




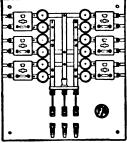
Cut No. 843



Cut No. 853



Cut No. 863



Cut No. 878

# RESIDENCE TYPE PANELS

Base Mains Finish

Black slate, oiled finish, 1/2 inch thick.

Branches Box

Door Front

Black state, once miss, 78 men times.

30 ampere.

Main and branch bus bars polished and lacquered.

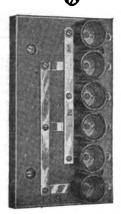
Double Pole Edison plug fuse connections.

No. 14 gauge steel, 1 inch larger all around than panel, with knockout holes opposite terminals for mains and branches.

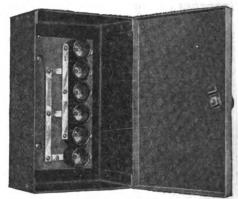
Flanged door, No. 14 gauge steel, for surface installation.

Made of No. 14 gauge steel, 1/2 inch larger all around than box for flush installation.

All doors fitted with A latch.



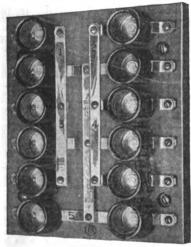
Cut No. B?



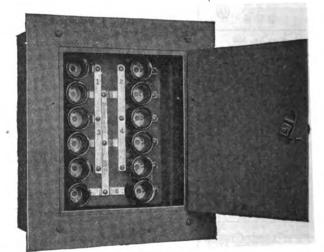
Cut No. E35

#### Main Terminals Only

B E A N C	Size of	f Panel	Number P	List Price Panel Only	With Flan	Door or Front With Plain	in Door Front	
H E 8	Wide	High	Panel Only	Only	Surface Catalog No.	List Price	Catalog No.	List Price
3 4 5	5 5 5	9 12 15	R28 R24 R25	\$ 4.20 5.10 6.00	R238 R248 R258	\$ 7.60 8.90 10.20	R33F R24F R25F	\$10.80 12.40 14.00



Cut No. R3



Main Terminals Only

Cut No. R3F

B R A	Size of	Panel	Catalog	List Price	Combination List Prices on Panel and No. 14 Gaug Steel Box, Door or Front					
C	-		Number	Panel	With Flanged Door		With Plain Door Front			
H			Panel Only	Only	Surface Type		Flush Type			
E	Wide	High			Catalog No.	List Price	Catalog No.	List Price		
6	8	9	R36	\$ 7.00	R36S	\$11.00	R36F	\$15.00		
8	8	12	R38	8.70	R38S	13.10	R38F	17.30		
10	8	15	R310	10.40	R310S	15.20	R310F	19.60		

# RESIDENCE TYPE PANELS

Base Mains Finish Branches

Box

Black slate, oiled finish, ½ inch.

30 ampere.

Main and branch bus bars polished and lacquered.

Double Pole Edison plug fuse connections.

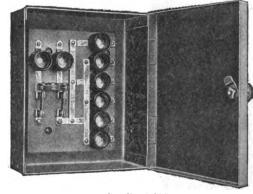
No. 14 gauge steel, 1 inch larger all around than panel, with knockout holes opposite terminals for mains, meter loops, and branches.

Flanged door, No. 14 gauge steel, for surface installation.

Made of No. 14 gauge steel, ¾ inch larger all around than box for flush installation.

All doors fitted with Door Front (atch.

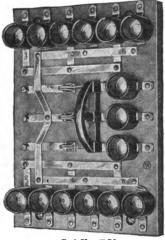




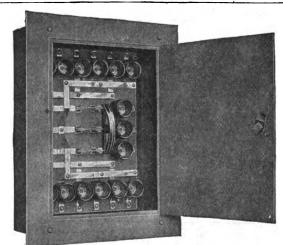
Cut No. ES2

Cut No. R828
Main Knife Switch With Fuse Connections

B R A	Size of Panel		Catalog	1 1		Combination List Prices on Panel and No. 14 Gaug Steel Box, Door or Front				
N C H		i	Number Panel Only	Panel Only	With Flan Surface		With Plain I Flush			
E S	Wide	High			Catalog No.	List Price	Catalog No.	List Price		
3 4 5	7 7 7	9 12 15	RS23 RS24 RS25	\$ 5.20 6.10 7.00	RS23S RS24S RS25S	\$ 8.60 9.90 11.20	RS28F RS24F RS25F	\$11.80 13.40 15.00		







Cut No. ESSF Main Knife Switch With Fuse Connections

B R A N	Size of	Panel	Catalog Number	List Price Panel Only	Combination List Prices on Panel and No. 14 Gasteel Box, Door or Front  With Flanged Door   With Plain Door Fron				
H E S	Wide	High	Panel Only		Surface Catalog No.	Type List Price	Flush Catalog No.		
8 8 10	9 12 15	12 12 12	RS36 RS38 RS310	\$ 9.20 10.90 12.60	RS368 RS388 RS3168	\$13.20 15.30 Dig17.40by	RS36F RS38F RS310F	\$17.20 19.50 21.80	



## TYPE B. F. D. (BOX AND FLANGED DOOR)

# FOR JUNCTION AND PULL BOXES ONLY For Surface Installation Only

Depth

Door

(FA) Plug



Construction Formed from one piece of sheet steel with lapped and riveted corners and %-inch flange turned in all around outside edge.

Thickness of Standard Code Thickness No. 14 U. S. Gauge for boxes of 1200 square inches or less in area, and under 49 inches in height, and No. 10 gauge for boxes over these sizes.

All boxes listed on this page are made 4 inches deep. For deeper boxes add 5% for each ½-inch increase in depth up to and including 8 inches, and for boxes deeper than 8 inches add 15% for each 1-inch or fraction thereof increase in depth over 4 inches deep.

Drilling All holes will be punched clear in boxes provided templets for holes are sent with order.

These doors are made of one piece of sheet steel of same thickness as ordered for box, and have a ½-inch flange or lap all along the four edges of the door. These doors are fitted with strong hinges placed not over 24 inches apart and with (FA) Catch and Yale Lock, and when box is over 24 inches wide it is furnished with double doors. The door must be ordered and shipped with box for the reason that the hinges are riveted and fitted to the box.

Finish Painted inside and out with two coats of P. & B. paint. Add 25% for black enamel finish.

Add 30% for baked white enamel finish.

We make an extra charge of 10% for boxes ordered with holes made knock-out. Note:—We believe knock-out holes are an unnecessary expense to the contractor, because we will furnish, on demand, (FA) plugs free; not exceeding 20% of the number of 1/2 and 1/2 holes specified for entire order, and these (FA) plugs can be placed in just the holes not used for conduit.

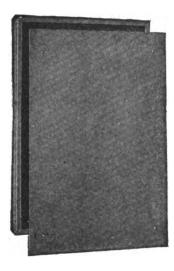
### LIST PRICES ON TYPE B. F. D. BOX AND FLANGED DOOR

Hei	ight					Insid	e Widtl	h of	Box I	n Inc	hes				
	Box	•	7	8	10	13	14	16	18	20	22	24	26	28	3
(	G	\$ 5.10	\$ 5.20	\$ 5.30	\$ 5.40	\$ 5.50 5.55	\$ 5.50 \$	5.50		\$ 5.90	\$ 6.10	\$ 6.30	\$12.30	\$12.50 12.70	\$12. 12.
i	.8	5.20	5.30	5.40	5.50	5.55	5.60	5.70	5.90	6.10 6.20	6.30 6.45	6.50 6.70	12.50 12.70	13.00	13.
	10	5.30		5.50	5.50	5.60	5.70	5.80 6.00	6.00 6.20	6.45	6.90	7.10	13.10	13.30	13.
- 1	12 15	5.40 5.50	5.50	5.60 5.70	5.70 5.80	5.80 5.90	5.90 6.15	6.30	6.75	7.15	7.50	7.90	14.05	14.50	15.
- 1	17	5.70	5.60 5.80	5.70 5.90	6.00	6.20	6.40	6.60	7.15	7.50	7.90	8.30	14.45	14.90	15
	19	5.90		6.10	6.20	6.40	6.60	6.80	7.30	7.90	8.25	8.65	14.85	15.40	16.
- 1	21	6.10		6.30	6.45	6.70	6.90	7.20	7.70	8.20	8.60	9.05	15.20	15.65	16
ı	23	6.30		6.50	6.70	6.90	7.10	7.35	8.00	8.60	8.90	9.40	15.65	16.20	17
i	25 25	6.50		6.70	6.90	7.10	7.30	7.55	8.35	8.85	9.25	9.75	16.05	16.70	17
- 1	27	6.70	6.80	6.90	7.10	7.30	7.65	7.90	8.60	9.20	9.65	10.20	16.45	17.00	17
GA {	29	6.80		7.10	7 30	7.55	7.80	8.10	8.80	9.55	10.00	10.50	16.80	17.40	18
	31	6.90		7.30	7.50	7.70	8.00	8.30	9.10	9.80	10.35	10.95	17.30	17.90	18
- 1	33	7.20		7.60	7.80	8.10	8.40	8.65	9.45	10.20	10.70	11.35	17.70	18.45	19
- 1	35	7.50		7.90	8.10	8.35	8.65	8.95	9.75	10.55	11.10	11.70	18.15	18.95	15
- 1	37	7.80		8.20	8.40	8.65	9.05	9.30	10.00	10.90	11.45	12.10	18.60	19.40	20
- 1	40	8.00	8.20	8.40	8.60	8.95	9.20	9.50	10.30	11.20	11.90	12.60	19.05	19.80	20
- 1	42	8.15	8.35	8.55	8.75	9.10	9.40	9.70	10.55	11.50	12.35	13.05	19.50	20.55	
l	44	8.55	8.75	8.95	9.15	9.40		10.05	10.95	11.90	12.65	13.45	19.90	26.75	28
- 1	46	8.75	9.95	9.15	9.35	9.70		10.25	11.10	12.25	13.05	13.85	26.25	27.45	28
- 1	48	8.95	8.15	9.35	9.55	10.20		12.40	13.50	14.65	15.50	16.25	29.30	30.45	31
'_	50	12.90	13.05	13.30	13.40	13.50	13.65	16.30	18.30	19.75	20.90	21.95	30.15	31.35	32
(	50 52	13.20	13.05	13.70	13.80	14.00	14.35	16.80	18.80	20.40	21.55	22.60	30.90	32.25	33
- 1	54	13.50	13.65	14.10	14.20	14.40	15.05	17.40	19.40	21.05	22.20	23.35	31.20	33.15	34
	56	13.80	14.20	14.60	15.00	15.80	16.90	17.80	20.00	21.65	23.00	24.00	31.95	34.00	3
1	58	14.10	14.90	15.30	15.70	16.50	17.60	18.40	20.60	22.25	23.45	24.75	33.30	35.00	36
- 1	61	15.10	15.50	15.90	16.30	17.10	18.20	19.00	21.10	22.95	24.15	25.50	34.10	36.00	38 39
- 1	63	15.60	16.00	16.40	16.80	17.70	18.70	19.50	21.60	23.55	24.80	26.25	34.95 35.85	36.95 37.85	40
	65	16.00	16.70	17.10	17.50	18.40	19.40	19.90	22.20	24.20	25.50	27.05			
GA.	67	16.50	17.30	17.70	18.10	19.00	20.00	20.50	22.80	24.90	26.15	27.70	37.90	40.05	43
<b></b> - }	69	16.90	17.90	18.30	18.70	19.60	20.60	21.00	23.30	25.55	26.85	28.50	38.80	41.10 42.05	44
I	71	17.50	18.60	19.00	19.40	20.30	21.30	21.70	23.80	26.20	27.60	29.25	39.65 40.55	43.15	46
	73	18.50	19.30	19.70	20.10	21.00	22.00	22.40	24.40	26.90	28.25	30.00 30.75	41.40	44.10	47
- 1	75	19.00	19.80	20.20	20.60	21.50	22.50	22.90	24.90	27.45	28.95 29.75	31.65	42.25	44.90	48
	77	19.90	20.70	21.10	21.50	22.40	23.40	23.80	25.50 26.00	28.15 28.80	30.60	32.45	43.10	45.80	49
1	79	20.80	21.60	22.00	22.40	23.30	24.30	24.50 24.90	26.00 26.60	29.45	31.25	33.30	43.95	46.70	50
- 1	81	21.30	22.10	22.50	22.90	23.80	24.80	25.50	26.60 27.10	30.05	32.00	34.10	44.80	47.60	51
	83	21.70	22.50	22.90	23.30 23.60	24.20 24.60	25.20 25.60	25.90	27.60	30.70	32.75	34.95	45.70	48.50	52
į	85	<b>22</b> .20	22.60	23.10	23.00	47.00	20.00	20.00		ritized b	w <b>C = C</b>	1001	16		



## TYPE B. S. C. (BOX AND COVER)

#### For Junction and Pull Boxes Only



Construction Formed from one piece of sheet steel with lapped and riveted of Box corners and ¾-inch flange turned in all around outside edge which is drilled and tapped for fastening cover.

Thickness of Standard Code Thickness No. 14 U. S. Gauge for boxes of 1200
Steel square inches or less in area and No. 12 for boxes over this size.

Depth All boxes of this type are made 4 inches deep. For deeper boxes

epth All boxes of this type are made 4 inches deep. For deeper boxes add 5% for each ½-inch increase in depth up to and including 8 inches, and for boxes deeper than 8 inches add 15% for each 1 inch or fraction thereof increase in depth over 4 inches.

Drilling All holes will be punched clear in boxes provided templates are sent with order showing location and size of holes wanted.

Cover These covers are made of one flat piece of sheet steel of same thickness as ordered for box and fitted with machine screws at corners for small boxes, with additional machine screws for large boxes, spaced not over 24 inches apart.

Finish These covers are painted with two coats of P. & B. paint. Add 25% for black baked enamel finish.

(FA) Plug We make an extra charge of 10% for boxes ordered with holes made knock-out.

Note:—We believe knock-out holes are an unnecessary expense to the contractor, because we will furnish, on demand, (FA) plugs free, not exceeding 20% of the number of ½ and ¾ holes specified for entire order, and these (FA) plugs can be placed in just the holes not used for conduit.

#### LIST PRICES ON TYPE B. S. C. BOX AND COVER

Heig	ght						W	'idth	of B	ox in	Inch	es					
of B	OX	4	5	6	7	8	10	12	14	16	18	20	22	24	26	28	30
14	6 8 10 12 15 17 19 21 23 25 27 29	\$ 2.80 2.90 3.00 3.10 3.40 3.50 3.60 3.80 4.00 4.20 4.30 4.40 4.55	\$ 2.80 2.95 3.10 3.50 3.60 3.70 4.00 4.30 4.40 4.40 4.450 4.65	\$ 2.85 3.00 3.20 3.60 3.60 3.70 3.80 4.10 4.30 4.40 4.50 4.60 4.75	\$ 2.90 3.10 3.30 3.50 3.60 3.70 3.90 4.10 4.30 4.40 4.50 4.50	\$ 3.00 3.20 3.50 3.60 3.70 3.80 4.00 4.20 4.40 4.50 4.60 4.95	\$ 3.20 3.50 3.60 3.70 3.80 3.90 4.10 4.30 4.50 4.65 4.75 4.90 5.05	\$ 3.40 3.60 3.70 3.80 4.25 4.40 4.65 4.80 4.95 5.05 5.25 5.40	\$ 3.60 3.70 3.80 3.90 4.00 4.55 4.75 4.95 5.10 5.25 5.50 5.80	\$ 3.70 3.80 3.90 4.05 4.65 4.90 5.05 5.35 5.50 5.65 5.90 6.10	\$ 3.80 3.90 4.00 4.25 5.10 5.40 5.55 5.85 6.10 6.35 6.45 6.70 7.00	\$ 3.90 4.00 4.10 5.40 5.70 5.95 6.25 6.55 6.75 7.00 7.30 7.45	\$ 4.10 4.20 4.30 4.65 5.70 5.95 6.25 6.55 6.80 7.05 7.35 7.75	\$4.30 4.40 4.50 5.00 6.00 6.30 6.60 6.90 7.10 7.40 7.75 7.95 8.25	\$ 5.80 5.90 6.00 6.05 6.30 6.55 6.90 7.15 7.40 7.70 8.25 8.60	\$ 6.00 6.20 6.30 6.35 6.60 6.85 7.20 7.45 7.80 8.10 8.65 9.10	\$ 6.44 6.66 6.70 7.40 7.70 8.00 8.44 8.88 9.01 9.33
ĠĀ.	33 35 37 40 42 44 46 48	4.80 4.95 5.20 5.35 5.50 5.80 6.00 7.45	4.90 5.05 5.30 5.45 5.60 5.90 6.10 7.50	5.00 5.15 5.40 5.55 5.70 6.00 6.15 7.60	5.10 5.25 5.50 5.65 5.80 6.10 6.25 7.70	5.20 5.35 5.60 5.75 5.90 6.20 6.35 7.80	5.30 5.45 5.70 5.85 6.00 6.30 6.45 7.90	5.70 5.85 6.10 6.35 6.50 6.70 6.95 8.30	6.10 6.35 6.60 6.75 6.90 7.20 7.35 8.70	6.50 6.75 7.00 7.15 7.30 7.60 7.75 9.10	7.25 7.40 7.65 7.85 8.10 8.40 8.55 9.90	7.75 8.05 8.35 8.55 8.80 9.10 9.40 10.65	8.05 8.30 8.60 8.95 9.25 9.60 9.90 11,35	8.55 8.85 9.15 9.55 9.90 10.20 10.50	9.00 9.30 9.60 10.00 10.35	9.50 9.85 10.20 10.60 12.05	10.10 10.5 10.8
	50 52 54 56 58 61 63 65 67	7.65 7.95 8.40 11.00 11.45 11.80 12.00 12.50 12.70	7.70 8.00 8.45 11.05 11.50 11.85 12.05 12.55 12.75	7.80 8.05 8.50 11.10 11.55 11.90 12.10 12.60 12.80	7.90 8.15 8.60 11.20 11.65 12.00 12.20 12.70 12.90	8.00 8.25 8.70 11.30 11.75 12.10 12.30 12.80 13.00	8.10 8.35 8.80 11.40 11.85 12.20 12.40 12.90 13.10	8.50 8.75 9.20 11.80 12.35 12.60 12.90 13.40 13.60	9.10 9.35 9.70 12.30 12.85 13.10 13.40 13.80 14.10	9.50 9.75 10.10 12.70 13.20 13.45 13.80 14.20 14.50	10.25 10.50 10.85 13.65 14.15 14.45 14.75 15.20 15.65	11.05 11.40 11.75 14.75 15.15 15.70 16.10 16.50 17.05	11.65 12.10 15.15 15.60 16.05 16.55 17.05 17.55 18.00	14.90 15.40 16.00 16.40 17.00 17.55 18.50 18.65 19.10	15.70 16.25 16.75 17.30 17.90 18.50 19.10 19.70 20.40	16.60 17.30 17.80 18.40 19.00 19.80 20.35 21.10 21.75	17.4 18.1 18.7 19.4 20.2 21.1 21.6 22.7 23.4
12 3 A .	69 71 73 75 77 79 81 83 85	12.90 13.40 13.35 14.00 14.30 14.80 15.10 15.50 15.70	12.95 13.45 13.70 14.05 14.35 14.85 15.15 15.55 15.75	13.00 13.50 13.75 14.10 14.40 14.90 15.20 15.60 15.80	13.10 13.60 13.85 14.20 14.50 15.00 15.30 15.70 15.90	13.20 13.70 13.95 14.30 14.60 15.10 15.40 15.80 16.00	13.30 13.80 14.05 14.40 14.70 15.20 15.50 15.90	13.80 14.30 14.55 14.90 15.20 15.60 15.90 16.40 16.60	14.30 14.80 15.05 15.40 15.70 16.10 16.40 16.90 17.10	14.70 15.20 15.40 15.80 16.10 16.50 16.80 17.30 17.50	16.00 16.30 16.70 17.15 17.50 17.90 18.30 18.60 19.00	17.55 18.00 18.50 18.90 19.35 19.90 20.35 20.70 21.25	18.45 19.00 19.50 19.95 20.75 21.00 21.55 22.05	19.95 20.20 20.65 21.25 21.85 22.40 22.95 23.50	20.90 21.50 22.20 22.80 23.40 24.00 24.60 25.05 25.80	22.40 23.20 24.50 24.60 25.30 26.00 26.50 27.10	24.4 24.9 26.1 26.7 27.5 28.1 28.8 29.4 30.2

USEFUL TABLES

Comparative Sizes Wire Gauges in Decimals of an Inch

No. of Wire Gauge	American Steel and Wire Gauge	Browne & Sharpe Gauge	Birmingham Stube'	British Imperial Standard*	Old English or London	French
0000000	.4900			.500		
000000	.4615	.58000		.464		l
00000	.4305	.51650	.500	.432		
0000	.3938	.46000	.454	.400	.4540	l
000	. 3625	.40964	.425	.372	.4250	l
00	.3310	.36480	.380	.348	.3800	1
Ŏ	.3065	32486	.340	.324	.3400	1
ī	.2830	.28930	.300	.300	.3000	1 .03
$ar{2}$	.2625	.25763	.284	.276	.2840	.04
. 3 · 4	.2437	22942	.259	.252	.2590	i .o.
. 4	.2253	.20431	,238	.232	.2380	) .0
5	.2070	.18194	.220	.212	.2200	.00
6	1920	.16202	.203	.192	.2030	l .0
ž	1770	.14428	.180	.176	.1800	.ŏ
8	.1620	.12849	.165	160	.1650	.i
9	.1483	.11443	.148	.144	.1480	l ii
10	.1350	.10189	.134	.128	.1340	l .i.
11	1205	.09074	.120	.116	.1200	i
12	.1055	.08081	.109	104	.1090	i
13	.0915	.07196	.095	.092	.0950	l ii
14	.0800	.06408	.083	.080	.0830	l i
15	.0720	.05706	.072	.072	.0720	i
16	.0625	.05700	.065	.064	.0650	.2
17	.0540	.03082	.058	.056	.0580	.2
18	.0475	.04323	.038	.048	.0490	.2
19	.0410	.03589	.049	.040	.0490	1 2
20	.0348	.03196	.035	.036	.0350	.2
20 21	.0317		.035	.032	.0315	:2
$\frac{21}{22}$		.02846		.032	.0295	.2
22 23	.0286	.02535	.028	.028	.0293	.3
23 24	.0258	.02257	.025 $.022$	.024	.0250	3
2 <del>4</del> 25		.02010	.022	.022	.0230	3
25 26	.0204	.01790			.0205	3
	.0181	.01594	.018	.018	.0205	.3
27	.0173	.01420	.016	.0164		.3
28	.0162	.01264	.014	.0148	.01650	.3
29	.0150	.01126	.013	.0136	.01550	.3
30	.0140	.01003	.012	.0124	.01375	
31	.0132	.00893	.010	.0116	.01225	.4
32	.0128	.00795	.009	.0108	.01125	.4
33	.0118	.00708	.008	.0100	.01025	.4
34	.0104	.00630	.007	.0092	.00950	.4
35	.0095	.00561	.005	.0084	.00900	.4
36	.0090	.00500	.004	.0076	.00750	.4
37	.0085	.00445		.0068	.00650	.4
38	.0080	.00396		.0060	.00575	.4
39	.0075	.00353	• • • •	.0052	.00500	5
<b>4</b> 0	.0070	.00314		.0048	.00450	.5

<sup>\*</sup>Also called New British or English Legal Standard.

# Minimum Size Wire for Motor Services When Concealed or Partly Concealed Wires Are Used

•••	Size	Wire B. & S. G	auge		Size	Wire B. & S. G	auge
H.P.	110 Volts	220 Volts	550 Volts	H.P.	110 Volts	220 Volts	500 Volts
1/2	14	14	14	30	0000	0	5
1	14	14	14	40		00	3
2	12	14	14	50	1	000	2
3	10	14	14	60	1	0000	1
4	8	12	14	70			C
5	6	10	14	80			00
71/2	4	8	14	90	1		000
10	3	6	12	100			0000
15	0	5	10	120			
20	00	3	8		Digitižed by	-nogle	
25	000	1	6		Digitized by	DOORIC	

#### TELEGRAPH APPARATUS





No. 103 With Legs

No. 108 Legless

## Steel Lever Keys

The lever and trunnion are made of one piece of fine wrought steel, polished and nickel plated, giving a perfect bearing and avoiding the loose trunnion trouble so common in other types. All other metal parts finely finished and lacquered.

Each key is fitted with improved adjustment spring holder.

Both knobs are of hard composition rubber.

The durability, lightness and quick action of the steel lever pattern are recognized by experts and operators.

The Postal and Western Union Telegraph Companies have adopted this type as their standard.

List	Mfr.	***	V. E. List
No.	No.	·	Each
<b>36</b> 0539	103	Key, with nickel-plated lever, brass frame, with legs	\$3.96
360540	105	Key, with nickel-plated lever, and frame, with legs	4.68
360541	106	Key, with silver-plated lever, and frame, with legs	6.30
360542	108	Key, with nickel-plated lever, brass frame, legless	4.32
360543	109	Key, with nickel-plated lever, and frame, legless	5.04
673			



No. 178 Eureka Type

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No. 180 Excelsior Type

## Eureka Learner's Instrument

The Eureka Instrument is a first-class, standard size telegraph set. All of the working parts—which includes key lever, sounder lever, sounder yoke or anvil, adjusting screws, etc.—are finely finished composition metal, such as is used in all high-grade instruments. Sounder base is japanned, striped with gilt. The base is mahogany and highly polished. The key is of the steel lever pattern, and sounder gives a loud, clear and distinct sound.

Key knob and circuit closer knob are of polished hard rubber composition.

This instrument will operate on a single standard dry cell. But key must be left open when not in use.

List	Mfr.	•	W. E. List
No.	No.		Each
360551	178	Eureka Telegraph Instrument, 5 ohms	\$5.76
360552	1 <b>79</b>		6.30

#### Excelsior Learner's Instrument

The Excelsior Learner's Instrument is designed to fulfill all the requirements of a short line apparatu at the least possible cost.

The sounder magnets, lever, anvil and key lever are the same as used on the Eureka outfit.

The frames for holding sounder lever and key lever are stamped from wrought iron and heavily japanned. This method of assembling insures permanent adjustment of the side motion of both key and sounder lever as there are no screws to become loose.

The base is mahogany finish highly polished.

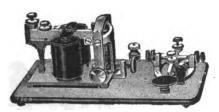
This is a neat and compact learner's instrument and will give entire satisfaction on lines up to five miles in length.

List No.	Mfr.	•w.	E. List Each
No.	No.		racn
360553	180	Excelsior Telegraph Instrument, 5 ohms	\$4.86
<b>3</b> 60554	181	Excelsior Telegraph Instrument, 20 ohms	5.46
Eit	th <b>er</b> of the s	bove sets can be furnished with key and sounder separate. Prices on application.	

A copy of "Philosophy and Practice of Morse Telegraphy" is furnished gratis with each set.

\*Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

#### TELEGRAPH APPARATUS



No. 135 Main Line Sounder with Key



No. 136 Main Line Sounder Only

#### Main Line Sounders

This sounder is recommended for wrecking, testing, switchboard or temporary office use, and all places where it is desirable to dispense with local batteries.

They are made with full size relay magnets of 150 ohms resistance having a special armature adjustment and are fully suited for doing in a greatly improved manner the work of regular main line box relays. They are sensitive to weak currents, giving a clear working sound on currents where without them, a relay with local sounder and battery would be absolutely necessary.

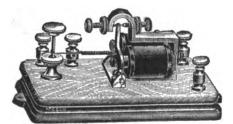
#### Main Line Sounder With Key

List	Mfr.	•	W. E. List
No.	No.		Each
360584 360585	135 138	150 ohms, with key	\$21.60 22.86

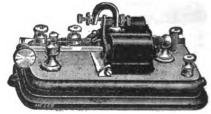
Special resistances to order.

#### Main Line Sounder Without Key

360586	136	150 ohms without key	\$18.00
360587	140	250 ohms without key	<b>19.26</b>



No. 115 Standard Pony Relay



No. 125 Commercial Standard Type

## Standard Pony Relay

#### Mounted on Polished Mahogany Base, with Metallic Sub-Base

This relay will operate on lines up to 20 miles, with perfect ease, in cases where main line sounders fail to give satisfaction.

List	Mfr.	**	V. E. List
No.	No.		Each
360559	114	5 ohms for burglar alarm work	<b>\$</b> 6.48
360560	115	20 ohms for lines up to 10 miles	6.48
360561	116	50 ohms for lines 10 to 30 miles	7.02
360562	118	75 ohms for lines 30 to 50 miles	7.56

## Commercial Standard Relay

This instrument embodies all modern improvements.

Polished rubber-covered coils, mahogany base, ornamental sub-base and extension adjustment.

360557	125	150 ohms resistance	\$14.40
<b>36</b> 0558	145	250 ohms resistance	15.66

Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

In construction, finish and general appearance Lionel Electric Toys have no equal.

All locomotive bodies are of sheet steel, not cast iron. They are enameled and ornamented in gold, with hand rails, bells, headlights and other fittings of nickeled steel. Every Lionel locomotive has an electric headlight.

All cars are hand enameled, not lithographed. They are decorated in gold, have removable roofs, seats in the interior, and imitation glass in windows and transoms. Being made of a heavier gauge of metal, they are more durable than any others. Wheels are nickeled steel. Trucks are flexible, which enables cars to stay on track at high speed.

Track is very rigidly constructed. Track ties are wider than any others. Insulated third rail makes

short circuits impossible.







No. 38

## Electric Type Locomotive for 21/2 Inch Track

	List Pric
No. 33. Length 11 ins., width 3 ins., height $4\frac{1}{2}$ ins. Outfit includes 8 sections curved track, making a circle $3\frac{1}{2}$ ft. in diameter. Has electric headlight and connection for lighting interior of passenger car.	<b>\$</b> 15.00
No. 38. Length 12 ins., width $3\frac{1}{2}$ ins., height 5 ins. Outfit includes 8 sections curved track, making a circle $3\frac{1}{2}$ ft. in diameter. Has electric headlight. Reversing controller and connection for lighting interior of passenger cars.	18.00
No. 53. Length 13 ins., width $3\frac{1}{2}$ ins., height 5 ins. Outfit includes 8 curved and 4 straight sections of track, making an oval $3\frac{1}{2}$ ft. wide by 5 ft. 9 ins. long. Has electric headlight, reversing controller and connection for lighting interior of passenger cars	
No. 42. Length 15½ ins., width 4 ins., height 6 ins. Outfit includes 8 curved and 4 straight sections of track, making an oval 3½ ft. wide by 5 ft. 9 ins. long. Has electric headlight, reversing controller and connection for lighting interior of passenger cars. Has 8 driving wheels, connected in pairs.	
No. 54. Dimensions same as No. 42. Locomotive of nickel and brass, beautifully finished.	41 26

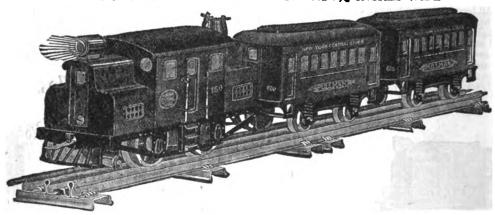


No. 6

## Steam Type Locomotive for 21/2 Inch Track

Decum Type Ecocomocive for =/4 inch Truck	
	List Price
Outfit No. 5. Comprises locomotive with electric headlight and reversing controller, 8S and 4C track, making an oval 3½ ft. by 5 ft. 9 ins. Length of locomotive, 11 ins	\$20.26
Outfit No. 51. Same as No. 5 with the addition of a double-truck tender, 7 ins. long	22.50
Outfit No. 6. Comprises locomotive and tender, 22 ins. long over all. Locomotive has electric headlight reversing controller and a 4 wheel pilot truck. Included are 8 C and 4 S track, making an oval 8½ ft. by 5 ft. 9 ins	31.50
Outfit No. 7. Similar in appearance to No. 6 with same track equipment, but finished entirely in nickel and brass	48.76

# LIONEL ELECTRIC TOYS TRAIN OUTFITS FOR "O" GAUGE TRACK 1½ INCHES WIDE



#### OUTFIT NO. 160

List Price

#### **OUTFIT NO. 161**

Outfit No. 161. Comprises No. 150 Locomotive with electric headlight, 1 No. 800 Box Car, 1 No. 801 Caboose, 8 sections OC curved track, making a circle 28½ ins. in diameter, and 1 No. 88 controlling rheostat. Length of train 20 ins.

\$7.50



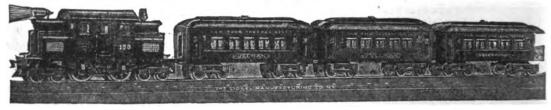
#### **OUTFIT NO. 162**

\$11.26

#### **OUTFIT NO. 164**

Outfit No. 164. Comprises No. 154 Reversing Locomotive with electric headlight, 2 No. 601 Pullman Cars, 1 No. 602 Mail Car, 8 sections OC curved track, 4 sections OS straight track, making an oval 28½ by 49 ins., and 1 No. 88 controlling rheostat. Length of train 31½ ins........

\$15.00

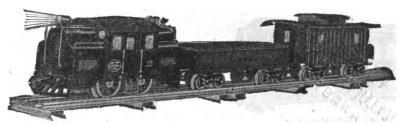


## Outfit No. 166. Passenger Train De Luxe

Outfit comprises No. 156 Locomotive, 2 No. 610 Pullman Cars, 1 No. 612 Observation Car, 8 sections OC curved track and 6 sections OS straight track, making an oval 28½ by 69 ins., also 1 No. 88 controlling rheostat. Length of train 39 ins.......

\$22.50

TRAINS FOR STANDARD GAUGE TRACK 21/4 INCHES WIDE



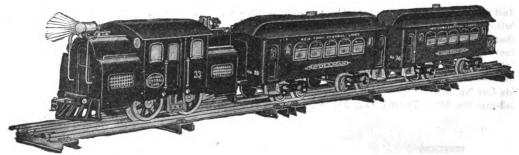
List Price Each

Electric Freight Train Outfit No. 37. Comprises No. 33 Locomotive, 1 No. 112 Gondola Car, 1 No. 117 Caboose, and 8 sections curved track, making a circle 3½ ft. in diameter. Length of

\$18.00

1 No. 117 Caboose and 8 sections curved track, making a circle 31/2 ft. in diameter. Length of

19.50



Electric Pullman Outfit No. 34. Comprises No. 33 Locomotive, 1 No. 35 Pullman Car, 1 No. 36 Observation Car, 8 curved and 2 straight sections of track, making an oval 4 ft. 8 ins. long 

21.76

30.00

27.00



Outfit Nos. 420. Passenger Train De Luxe. Comprises No. 42 Locomotive, 1 each Nos. 18 Pullman Car, No. 19 Pullman and Baggage Car, No. 190 Observation Car, 8 curved and 8 straight sections of track, making an oval 3½ ft. wide by 8 ft. 2 ins. long. The outfit also includes a series of 3 lights complete with cords for interior illumination of the cars...

52.50

Outfit No. 421. Similar to Outfit No. 420, but equipped with Locomotive No. 54, finished in

63.76

Electric Passenger Outlit No. 44. Comprises No. 42 Locomotive, 2 No. 29 Day Coaches, 8 curved and 4 straight sections of track, making an oval 31/2 ft. wide by 5 ft. 9 ins. long. Length of train, 52 ins.

37.50



Steam-Type Electric Pullman Outfit No. 620. Equipment and cars are same as described in Outfit No. 420, but has steam-type Locomotive No. 6 instead of the electric-type No. 42...... Steam-Type Electric Pullman Outfit No. 621. Similar to Outfit No. 620 described above,

60.00 75.00

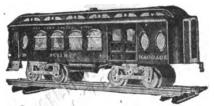
but has steam-type Locomotive No. 7, finished in nickel and brass; a strong, beautiful outfit....

Electric Pullman Outfit No. 52. Comprises No. 53 Locomotive, 1 each Nos. 180 Pullman Car, 181 Pullman and Baggage Car, 182 Observation Car, 8 curved and 4 straight sections of track, making an oval 3½ ft. wide by 5 ft. 9 ins. long. Length of train, 54 insight sections of track,

37.50

Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house,

#### CARS FOR STANDARD AND "O" GAUGE TRACK







**Observation Car** 

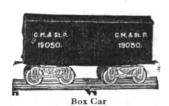
FOR "O" GAUGE TRACK 11/4 INCHES WIDE	List Price Each
Pullman Car No. 600. 6 ins. long, 2 ins. wide, 3 ins. high	<b>\$</b> 0.76
Pullman Car No. 601. 7½ ins. long, 2¾ ins. wide, 3½ ins. high	1.36
Mail Car No. 602. 7½ ins. long, 2¾ ins. wide, 3½ ins. high	1.36
Pullman Car No. 610. 8¾ ins. long, 2½ ins. wide, 4 ins. high	3.00
Observation Car No. 612. 8¾ ins. long, 2½ ins. wide, 4 ins. high	3.00
Box Car No. 800. 6 ins. long, 2 ins. wide, 3 ins. high	.76
Cattle Car No. 802. 6 ins. long, 2 ins. wide, 3 ins. high	.76
Caboose No. 801. 6 ins. long, 2 ins. wide, 3¼ ins. high	.76
Box Car No. 820. 7½ ins. long, 2% ins. wide, 3½ ins. high	1.36
Caboose No. 822. 71/2 ins. long. 23/2 ins. wide. 33/2 ins. high	1.36



Caboose

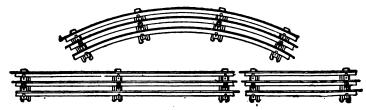


Cattle Car



FOR STANDARD GAUGE TRACK 21/4 INCHES WIDE	List Price Each
Pullman Car No. 35. 11 ins. long, 3 ins. wide, 5 ins. high	<b>\$4</b> .50
Observation Car No. 36. 11 ins. long, 3 ins. wide, 5 ins. high	4.50
Pullman Car No. 180. 12½ ins. long, 3½ ins. wide, 5 ins. high	<b>5.26</b>
Pullman and Baggage Car No. 181. 12½ ins. long, 3½ ins. wide, 5 ins. high	6.00
Observation Car No. 182. 12½ ins. long, 3½ ins. wide, 5 ins. high	6.00
Pullman Car No. 18. 16½ ins. long, 3½ ins. wide, 6 ins. high	6.75
Pullman and Baggage Car No. 19, 16½ ins. long, 3½ ins. wide, 6 ins. high	7.50
Observation Car No. 190. 16½ ins. long, 3½ ins. wide, 6 ins. high	7.50
Day Coach No. 29. 16 ins. long, 3 ins. wide, 6 ins. high	<b>5.26</b>
Gondola Car No. 112. 9½ ins. long, 3 ins. wide, 2½ ins. high	1.50
Cattle Car No. 113. 9½ ins. long, 3 ins. wide, 4½ ins. high	2.24
Box Car No. 114. 9½ ins. long, 3 ins. wide, 4¼ ins. high	2.24
Ballast Car No. 116. 9½ ins. long, 3 ins. wide, 3¾ ins. high	2.24
Caboose No. 117. 9¾ ins. long, 3 ins. wide, 4¾ ins. high	2.24
Flat Car No. 11. 11 ins. long, 3½ ins. wide, 3½ ins. high	2.54
Gondola Car No. 12. 11 ins. long, 3½ ins. wide, 3½ ins. high	3.00
Cattle Car No. 13. 11 ins. long, 3½ ins. wide, 5½ ins. high	3.74
Box Car No. 14. 11 ins. long, 3½ ins. wide, 5½ ins. high	3.74
Oil Car No. 15. 11 ins. long, 3½ ins. wide, 5¼ ins. high	3.74
Ballast Car No. 16. 11 ins. long, 3½ ins. wide, 4¾ ins. high	3.74
Caboose No. 17. 934 ins. long, 3½ ins. wide, 6½ ins. high	3.74
Delivery F. O. B. New York City. For warehouse deliveries write nearest house.	

#### TRACK AND ACCESSORIES FOR STANDARD AND "O" GAUGE



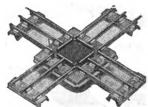
Standard Gauge Track

#### STANDARD GAUGE TRACK, 21/4 INCHES WIDE

		List Price
No. C, 16½ ins. long, curved	Per section	<b>\$</b> 0.38
No. CC, 16½ ins. long, curved, with battery connections	Per section	. 52
No. S, 14 ins. long, straight	Per section	.38
No. ½S, 7½ ins. long, straight	Per section	.30
No. SC, 14 ins. long, straight, with battery connections	Per section	.52
"O" GAUGE TRACK, 11/4 INCHES WIDE		
OS straight track, 10½ ins. long	Per section	<b>\$</b> 0.22
OSC straight track, 10¼ ins. long, with battery connections	Per section	. 38
OC curved track, 11½ ins. long	Per section	.22
OCC curved track, 11½ ins. long, with battery connections	Per section	.38



Switches No. 22, 21, 022 and 021



Crossing No. 20, 020 and 020X

#### FOR "O" GAUGE TRACK, 11/4 INCHES WIDE

Lis	st Price
Switch No. 022. (Right and left hand). Construction is similar to No. 22 switch. Length 11½ ins.; width 5½ ins.; height 3 ins.  Electric Switch No. 021. (Right and Left Hand.) Similar in construction to No. 21 Switch. Length 11½ ins.; width 5½ ins.; height 3 ins.  Crossing No. 020. Similar in construction to No. 20 Crossing. Measures 10¼ ins. square.	\$2.24 3.00 1.12
Crossing No. 920X. A 45 degree crossing for use with curved sections only. Length $10\frac{1}{4}$ ins.	1.50

Switch No. 22.



Lamp Post Semaphore

FOR STANDARD GAUGE TRACK, 2½ INCHES WIDE (Right and Left Hand.) Length 16½ ins.; width 8 ins.; height 4½ ins. Connects with track in same manner as straight or curved sections..... \$3.00 Electric Switch No. 21. (Right and Left Hand.) This is similar in construction to No. 22 described above, but is equipped with an electric signal, having a 14 volt bulb, which can be easily removed... 3.74 Crossing No. 20. For use in conjunction with switches, enabling the formation of Fig. 8 and Fig. 8 loop. Measures 12 ins. square. Cross rails are mounted on a solid base... 1.50 Lamp Post No. 61. 1 light, complete with electric globe... Lamp Post No. 67. 2 lights, complete with 2 electric globes 2.24 3.74 Semaphore No. 63. 1 arm, no light.

Semaphore No. 64. 2 arms, no light.

Semaphore No. 65. 1 arm, 1 light.

Semaphore No. 66. 2 arms, 2 lights.

No. 118 Tunnel for "O" Gauge, 1½ in. Track.

No. 119 Tunnel. 16 ins. long, for either "O" Gauge or Lionel

Standard Gauge track. 1.12 1.50 2.243.74 1.88 3.00 Tunnel No. 120. 20 ins. long, for both gauges.

No. 121 Station. Substantially constructed and finely finished in colors. Size, 14 x 10 x 9 ins. 5.265.26

Delivery F. O. B. Factory, New York City. For warehouse deliveries write nearest house.

### Western Electric

# CLAMPS, CLEATS AND STRAPS

## Ground Clamps

## G-V-TYPE A GROUND CLAMP

This Clamp is copper, tinned. For No. 4 wire and smaller. No iron enters into the construction of this clamp.

List No.	Size	Std. Pkg.	List Price Each	List No.	Size	Std. Pkg.	List Price Each
5014 5038 5012 5034 5001 5114	BX 3/8" 1/2" 1 " 11/4"	100 100 100 100 100 75 75	\$0.48 .48 .48 .56 .68 .80	5112 5002 5212 5003 5312 5004	1½", 2'', 2½", 3'', 4'''	50 50 25 25 10	\$0.92 1.04 1.16 1.28 1.60 1.76

#### SHAWMUT GROUND CLAMP

These Clamps are made for use on 3/8 inch to 3 inch pipe, and are so constructed as to give the maximum strength with a minimum amount of metal, thus reducing cost. The Clamps will hold No. 4 Ground Wire.

List No.	Size	Std. Pkg.	List Price Each	List No.	Size	Std. Pkg.	List Price Each
580881 580882 580883 580884 580885	38" 12" 34" 114"	100 100 100 50 50	\$0.24 .24 .28 .34 .40	580886 580887 580888 580889	1½", 2'', 2½", 3'''	50 25 25 25 15	\$0.46 .52 .58 .64

#### NEW YORK GROUND CLAMP

These Ground Clamps are made in three types, A, B, and D. Type A clamps are for connecting telephone and telegraph ground wires to pipes or cables. Type B clamps are for making ground connections for electric light wires without the use of solder. Binding posts provide connections for No. 2 and No. 4 B. & S. wires. Type D for electric light and motor work.

			List Price				List Price
List No.	Type	Size	per 100	List No.	Type	Size	per 100
580890	À	1" pipe	\$11.00	List No. 580988	B	3" pipe	\$63.50
580891	A	2" pipe	13.50	580989	В	4" pipe	68.00
<b>580892</b>	A	3" pipe	16.00	580990	$\mathbf{D}$	1" pipe	50.00
<b>580893</b>	В	1" pipe	56.00	580991	$\mathbf{D}$	2" pipe	52.50
580847	В	2" pipe	60.00	580992	$\mathbf{D}$	3" pipe	<b>56.00</b>
		• •	I)	580993	D	4" pipe	60.00

#### SECURITY CONDUIT CLAMP

This Clamp may be used for supporting conduit on brick or concrete walls, ceilings, iron beams, etc. It is stamped from ½ inch steel and is black enameled to prevent rust. These clamps are made in ½, ¾, and 1 inch size, and are packed in boxes containing 100 of a size.

	•	List Price per 1000							
List No.	Size	Less than 100	100-500	500-1000	1000 and Over				
580894	₹"	\$30.00	\$24.00	<b>\$20.00</b>	\$18.00				
580895	34" 1 "	45.00	<b>36</b> .00	30.00	27.00				
580896	1 "	75.00	60.00	<b>50.00</b>	45.00				

#### **BRASS CLEATS**

	BRASS CLEATS	8td. Pkg.	List Price	
List No.	Description		per 100	
15118	For \dagger\dagg	250	\$39.00	
15100	For %" outside diameter wire	250	48.00	
15103	For ½" outside diameter wire	250	60.00	
15108	For \\" outside diameter wire	250	90.00	
15102	Corner Cleat, for 3/8" outside diameter wire	250	45.00	
15104	Corner Cleat, for 1/2" outside diameter wire	250	48.00	
15116	Corner Cleat, for ##" outside diameter wire	250	75.00	

#### PIPE STRAPS

		Aprx.		List	1				Aprz.		List
List		Ontv.	Std.	Price	List				Qnty.	Std.	Price
No.	Size	per Lb.	Pkg.	per Lb.			Size	<b>D</b>	er Lb.	Pkg.	per Lb.
290	1/2 Pipe Strap		1000	\$0.50	295	1 "	Pipe	Strap	16	50	<b>\$</b> 0.50
	3/8" Pipe Strap		1000				Pipe	Strap	10	25	. 50
	1/2" Pipe Strap		1000					Strap		25	. 50
	24" Pipe Strap		500					Strap		20	. 50
	Pipe Strap		100					Strap		20	. 50



G. V. Type A



"Shawmut" Ground Clamp



New York Type A



Security Conduit Clamp



Cleat



Corner Cleat



Pipe Strag





»Google